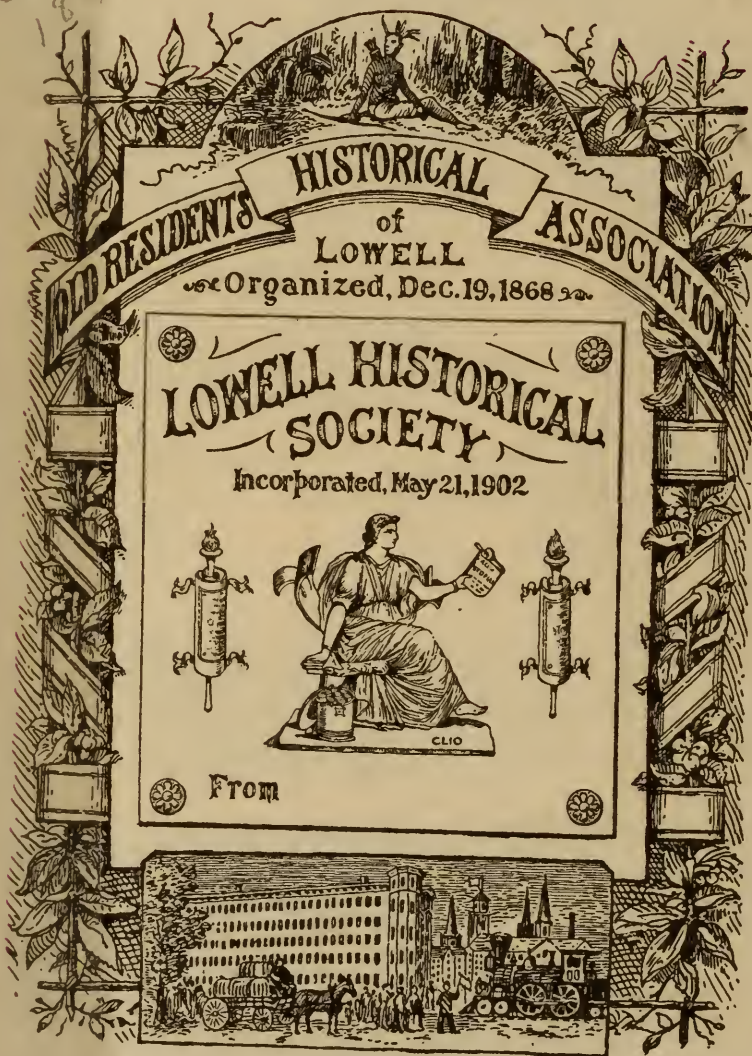
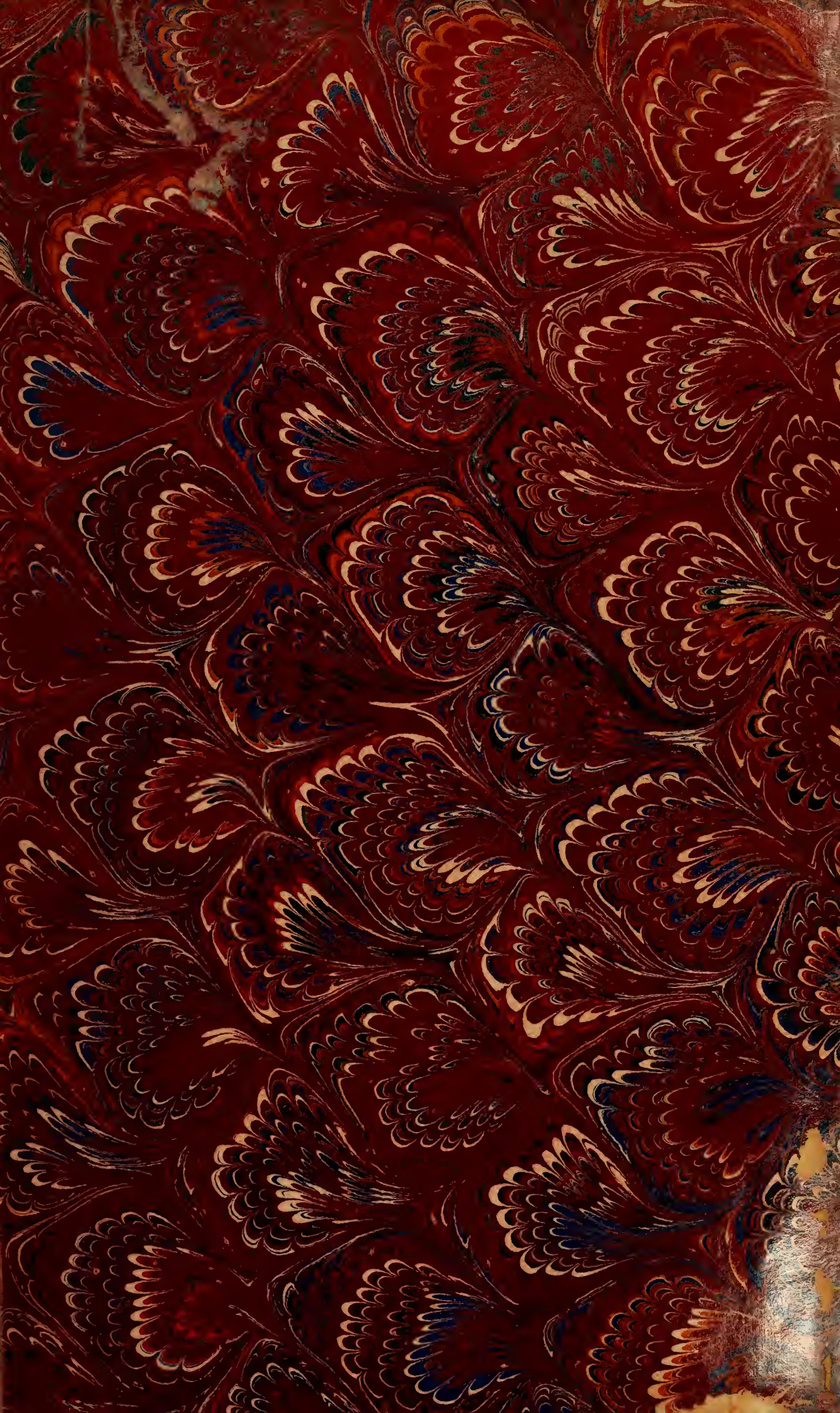


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EXTRACT FROM THE ORDINANCES OF LOWELL.

CHAPTER VIII.—CITY DOCUMENTS.

SECTION 5. All City Documents (except the Rules and Regulations for the Government of the Police and Fire Department) shall be printed in pamphlet form of the size of the Annual Report of the School Committee.

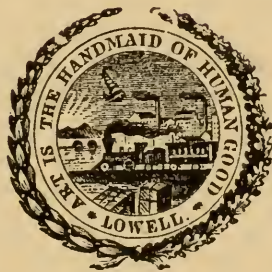
SECTION 6. All City Documents shall be bound together in one volume, under the direction of the City Clerk, and three or more copies shall be placed in the City Library, and one copy in the library of the Middlesex Mechanics' Association, one copy shall be sent to each city of the Commonwealth, to the library of the Harvard College, the Public Library of Boston, the State Library, the Smithsonian Institute at Washington, and the Old Residents' Historical Association of Lowell.

CONTENTS.

1. Inaugural Address of His Honor, George W. Fifield, Mayor, to the City Council, Jan. 4, 1892.
2. Municipal Register, containing Rules and Orders of the City Council, and a list of the Government and Officers of the City of Lowell, for 1892.
3. Sixty-sixth Annual Report of the School Committee of Lowell, together with the Twenty-eighth Annual Report of the Superintendent of Schools, 1891.
4. Auditor's Fifty-sixth Annual Report of the Receipts and Expenditures of the City of Lowell, together with the Treasurer's Account, and the Account of the Commissioners of Sinking Fund, for the financial year ending Dec. 31, 1891.
5. Nineteenth Annual Report of the Lowell Water Board, and Reports of the Superintendent of Water Works and the City Engineer, to the Water Board, for 1891.
6. Report of the Overseers of the Poor, with the accompanying papers, 1891.
7. Report of the City Dispensary, 1891.
8. Report of the Births, Marriages, and Deaths, 1891.
9. Report of the Superintendent of Burials, 1891.
10. Report of the Board of Health, 1891.
11. Report of the Inspector of Milk and Vinegar, 1891.
12. Report of the Superintendent of Streets, 1891.
13. Report of the Chief Engineer of the Fire Department, 1891.

14. Report of the Superintendent of Street Lights, 1891.
15. Report of the Superintendent of Public Buildings, 1891.
16. Report of the Police Department, 1891.
17. Report of the Trustees of the City Library, 1891.
18. Report of the City Solicitor, 1891.
19. Report of the Superintendent of the City Scales, 1891.
20. Report of the Sealer of Weights and Measures, 1891.
21. Salaries of the Officers of the City of Lowell for 1892.

THE INAUGURAL ADDRESS
OF
HIS HONOR,
GEORGE W. FIFIELD,
MAYOR OF THE CITY OF LOWELL,
TO THE
TWO BRANCHES OF THE CITY GOVERNMENT,
JANUARY 4, 1892.



LOWELL:
DAILY NEWS JOB PRINT, HILDRETH BUILDING,
1892.

CITY OF LOWELL.

IN COMMON COUNCIL, January 4, 1892.

Order requesting a copy of the Mayor's Address.

ORDERED, if the Board of Aldermen concur, That His Honor the Mayor be requested to furnish a copy of his Inaugural Address for publication.

IN COMMON COUNCIL, January 4, 1892.

Read and adopted; sent up for concurrence.

DAVID CHASE, *Clerk.*

IN BOARD OF ALDERMEN, January 4, 1892.

Read and adopted in concurrence.

MICHAEL J. DOWD, *City Clerk.*

ADDRESS.

MEMBERS OF THE CITY COUNCIL:

Gentlemen :—The important duty of conducting the affairs of 80,000 people has been placed in our hands for the year of 1892.

This is an honorable and important trust and by an oath taken today we promise to faithfully serve this constituency to the best of our ability. This is not a commonplace expression if supported by an honest and earnest conviction. There is no legitimate connection between the conduct of our city affairs and the policies adopted by either of the political parties of State or Nation, and in the determination of the various matters coming before us, we should discard all partisan policies and sectional considerations and be governed solely by a desire for the best interests of the whole city. Especially should this control your action in your first important duty, namely: The selection and election by you of officials and heads of departments, as required by the Charter and Ordinances, as the success of an administration largely depends upon your wise, careful and conservative choice of

the men called by you to fill these most important positions; honesty, ability and experience should be the tests by which you should be governed in your choice. By such a course of action, you will lay the foundation for an administration of the affairs of our city which will merit and receive the endorsement and approval of the people.

I will invite your attention to a consideration of the financial condition of the city, of the expenses of the various departments during the past year, and of the needs and outlays of the departments during the current year.

FINANCIAL.

The tax rate has been reduced from \$17.00 in 1890 to \$15.60 in 1891, with only a natural average increase in the valuation; the tax rate for the current year should not exceed the rate for the past, but it should be our earnest effort to make a still further reduction, and with your co-operation, I am not without hopes of success.

The Auditor of Accounts furnishes me with the following financial exhibit for the year 1891:

Cash in the treasury, Jan. 1, 1891.....	\$ 89,534 08
Amount received into the treasury during the year..	2,894,341 54
	<hr/>
Making a total of.....	\$2,983,875 62
Amount paid from the treasury during the year 1891	2,695,157 24
	<hr/>
Cash in the treasury, Dec. 31, 1891.....	<u>\$288,718 38</u>

CITY DEBT.

Amount of ordinary city debt, Jan.	
1, 1891.....	\$1,683,000 00
Amount borrowed during year 1891..	731,000 00
Total	<u>\$2,414,000 00</u>
Amount paid during the year 1891...	144,800 00
Total ordinary city debt, Dec. 31, 1891	<u>\$2,269,200 00</u>
Amount of the debt of the city on account of Water Works, Jan. 1, 1891	\$1,211 000 00
Amount borrowed during year 1891..	260,000 00
Total	<u>\$1,471,000 00</u>
Amount paid during the year 1891 ...	286,000 00
Total debt of the city on account of water works, Dec. 31, 1891.....	<u>1,185,000 00</u>
Total debt of the city, Dec. 31, 1891,	<u>\$3,454,200 00</u>
Ordinary city debt, Dec. 31, 1891....	\$2,269,200 00
Amount of the several sinking funds, for the payment of the same, Dec. 31, 1891.....	801,527 46
Net ordinary debt of the city, Dec. 31, 1891	<u>\$1,467,672 54</u>
Debt of the city on account of water works, Dec. 31, 1891.....	\$1,185,000 00
Amount of the several sinking funds for the payment of the same, Dec. 31, 1891.....	82,622 11
Net debt of the city on account of water works, Dec. 31, 1891.....	<u>1,102,377 89</u>
Total net debt of the city, Dec. 31, 1891	<u>\$2,570,050 43</u>
Total net debt of the city, Dec. 31, 1890	<u>2,160,758 59</u>
Increase in the net debt of the city during the year 1891.....	<u>409,291 84</u>

You will observe that the net city debt is increased \$409,291.84 during the past year. This increase is due to the fact that we have raised for the new City Hall and Memorial Buildings, High school-house, Moody school-house, the new pumping engine, two new fire engine houses, the sum of \$572,000.

STREETS.

During the year there has been raised for this department, by the annual tax levy, the sum of \$75,000, and added to this was \$30,000 transferred from the reserved fund, and \$23,574.36 from sidewalk assessments and other sources; making a total of \$130,850.28 expended by the department for the year 1891. This money has been judiciously used, inasmuch as it has been expended upon the streets instead of for political rewards, and the consequence is a marked improvement in our streets and ways. Should this improvement continue during the year, our thoroughfares will be in a more satisfactory condition than they have been for many years. The department is under the control of the Committee on Streets, and with the same conservative and wise management as has controlled its workings during the past year, the taxpayers will have every cause for congratulation over the results.

I would recommend the continuance of the policy of laying fully \$25,000 worth of granite blocks this year, the money to be raised by loan, as this is a permanent improvement.

SEWERS.

The work of the Sewer Department during the year has been the most satisfactory in the history of the department. Petitions for sewers which have been pigeon-holed and avoided for a long while have been taken up, acted upon and the sewers built. The work has all been done by day labor, and in every instance cost less than the estimates of competent judges. The construction of the sewers in Pawtucketville, Phillips Street, Tanner Street and Lawrence Street was particularly difficult and both the Superintendent and the men are deserving of warm praise for the good results attained.

Sewers are necessary to the health and comfort of our people, and all demands for them that are just and reasonable should be granted. Our sewerage system has grown from one calculated for a country village, to one for a city of 80,000 inhabitants. Many of the old sewers and drains which have been retained during past years, are wholly inadequate to meet the present needs. These, as well as all ordinary repairs, should be paid out of the tax levy.

In the case of new sewers, I believe the expenses should be met by a loan, as sewers are as permanent and as necessary improvements as the water works, and, as in the case of the latter project, the expenses should be borne by future generations.

SCHOOLS AND SCHOOL-HOUSES.

The reports of the School Committee and of the Superintendent of Schools, are filled with interesting details of the management of these important departments of our educational system. The day schools of all grades are filled in most cases to their utmost limit, and the evening schools continue to afford to those unable to attend the day schools an excellent opportunity for improvement, the acquisition of knowledge and the discipline of education and study. Our public schools, as a whole, I believe to be wisely conducted, and I feel sure that they fill the place intended for them among our institutions. During the past year Mr. George F. Lawton resigned as Superintendent of Schools, and his place has been filled by the choice of Mr. Arthur K. Whitcomb.

Many of our school-houses have been extensively repaired as needed. The High School building has been taken down. A temporary High School building erected on the Mann lot, accommodating most of the High School scholars. Land adjoining the High School on Kirk Street has been purchased, the foundation for a new High School building, amply large for coming needs, has been laid. All is paid for, and a sufficient sum to complete the structure is in the hands of the City Treasurer.

The Moody School failing to accommodate, both as regards room and location, the needs of the child-

ren of Belvidere, a new site has been selected for the erection of a grammar school building; there the foundation is laid, all is paid for, and the money required to finish the building, is also in the hands of the City Treasurer.

The total expenditures for schools for the past year has been \$200,028.27, and for school-houses \$47,108.94.

STATE AID.

The whole amount disbursed by this department was \$22,700.75. The sums paid for State Aid to those who received pensions from the United States, is repaid by the State to the City, and of the amount paid to those who received no pension, one-half is repaid by the State to the City.

CITY LIBRARY.

The collection of books owned by the city is a valuable, useful and growing one. Its use and value for reading, and more particularly for reference purposes, depends upon its careful cataloging and shelving. By the recently introduced catalogue system the first has, I believe, been fully secured, and upon the completion of the rooms intended for library use in the Memorial building, we shall have full facilities for

properly placing all our works of value and use. The destruction of the Library by fire, which seemed almost certain last year, was fortunately averted, and the loss of many books now out of print and which would have been irreparable was thus prevented. It is believed that when our present collection of books, magazines and papers are properly classed and placed in the new and spacious quarters now being finished, it will be found that we have, as a finality, suffered no real loss. A considerable sum has been spent during the year for new books, principally of a classical and instructive nature. During the year the Librarian, Mr. Charles. H. Burbank, who filled the office so acceptably for years, resigned, and Mr. F. A. Chase has been chosen to his place.

The Reading Room has been maintained during that portion of the year since the fire, in temporary quarters, but will return again to the Library on its removal. The Reading Room is of great value from an educational and instructive standpoint, and should receive all possible aid and attention at our hands.

The expenditures upon account of Library during the year were \$17,307.86.

CEMETERIES.

There are three cemeteries owned and cared for by the city: Edson, the No. Two or the Old Burial Ground opposite the Fair Grounds, and the School

Street Yard. The principal one, the Edson Cemetery, is the only one in which there have been vacant lots for some years past, and in 1890, the last of these were taken. In the early part of 1891, it appearing that there were no vacant lots to be had there, an effort was made by the City to acquire by purchase adjoining lands, but without success. I then petitioned the General Court for an act authorizing the City of Lowell to seize land for the enlargement of its burial grounds and to provide for their management. An act was passed substantially as petitioned for, was approved May 16, 1891, and is Chapter 337 of the Acts of that year.

Under the authority of law, the City Council seized and took possession of about six acres of land adjoining the Edson Cemetery. This land has been prepared for purposes of interment, and has become a part of the Edson Cemetery. This legislative act also vested the management of all public burial grounds belonging to the city, in a board of three Trustees, the Mayor, by permission of the act, becoming a member and Chairman of the Board, and by appointment Messrs. Frank B. Dow and Fred Woodies constitute the other members of the Board.

This Board of Trustees found awaiting them many important matters, uncared for during many years, which demanded their immediate attention, and, under the existing circumstances, have made as rapid progress as possible.

The records of the City Cemeteries are not in a satisfactory or proper condition; and while as yet the Board has employed no clerical assistance, it hopes during the present year to so straighten the records and arrange the affairs of our City Cemeteries, as to be able to make a comprehensive report upon these subjects, which will form a part of the City Documents of 1892.

The amount expended for the past year for the care of cemeteries, including the cost of preparing the newly acquired land, was \$2,841.25.

CITY HALL AND MEMORIAL BUILDINGS.

Considerable progress has been made in the construction of the new City Hall and Memorial Building during the last year. The Memorial Building, especially, has made substantial progress toward completion, and the Commissioners think that it will be ready for occupancy in June next, when the Public Library will be removed there, and the citizens of Lowell will have reason to take just pride in the splendid quarters afforded this educational institution. On account of the non-delivery of granite, which was due to some extent to the financial difficulties of the contractors, slow progress was made on the new City Hall until the latter part of the year, when the difficulties were largely overcome by the Commissioners. However, the roof

is now being placed on the building, and there is every reason to hope that the inside work will be finished as rapidly as is consistent with good workmanship.

Both buildings have cost to date \$259,791.59.

FIRE DEPARTMENT.

Our Fire Department is a credit to Lowell, and is second to none of its size in New England. Having an efficient corps of men, a liberal equipment of apparatus, and a generous supply of water, we are able to cope with the worst conflagrations, and amply protect our property from the dangers of fire. We cannot praise too highly the devotion of our firemen, who always on duty, and oftentimes in the face of great danger—even at the risk of their lives—give the people their best services.

During the year, two new engine houses have been started, one in Pawtucketville and the other in the mill district of Ward Three. Both sections have been in great need of fire equipment for years, and when these houses are completed and the apparatus and men assigned to them, the whole city will be well protected.

There are in the department, a chief engineer, four assistant engineers, fifty-two permanent men, eighty call men, thirty-seven horses, four steamers, three

trucks, five hose-wagons, two chemical engines, and one patrol wagon.

The cost of the department during the year has been \$106,496.73.

WATER DEPARTMENT.

The volume of business for Lowell Water Works for 1890 and 1891, is shown by the following figures, the receipts of 1891 being up to close of business on Saturday, Dec. 28th.

The total charges for water for 1891 have been \$201,602.94, as against \$193,616.76 in 1890, an increase of \$7,986.18 for water alone, and showing the largest business in any year since the establishment of the works,—an increase which is natural with the growth of the city.

The expenditure for interest for 1891 was \$54,270, as against \$115,012.50 for the previous year, or a saving of \$60,742.50, brought about by the refunding process of last year.

The extraordinary or unusual expenditures of the year have been for:

Duplicating Conduit Line, 30-inch pipe.....	\$28,655 93
New Shop and Stable (not including addition to Engine Room and Boiler House).....	16,706 64
Experimental work on Wells and Filtration, and general work to the end of improving the Water Supply	3,179 17
Total.....	<u>\$48,541 74</u>

Deducting this amount, extraordinary expenditures (\$48,541.74) from total expenditures of the year (\$180,250.56), and again deducting the remainder from the receipts of the year, we shall find for surplus earnings above expenditures, \$69,894.12.

The Water Board has already taken steps to parallel the present 20-inch force-main from the pumping-station to the reservoir, with a 30-inch line of pipe,—a step of necessity following the adding of an additional pumping engine of 10,000,000 gallons capacity to the pumping plant. This work the Board proposes doing the coming summer, and at an estimated cost of \$25,000. This done, it will be readily seen that the Water Works will be on a basis of earnings equal, with the natural increase of earnings of another year, to fully \$75,000 above total expenditures.

Such being the case, it would seem that the time is ripe for a lessening of rates to consumers, an easement that will be welcomed by our taxpayers, and this may be a subject for the consideration of the City Government of 1892. The matter should be dealt with carefully, and the whole subject thoroughly understood before changes are made. The lessening of the charge for water by meter, to large consumers, would be a step in the direction of encouraging manufacturing interests, and benefits following such encouragement would most certainly benefit all.

The Water Department has during the year built brick work-shops, stables and sheds on the pumping

station land. This has been done to concentrate the entire outside work at one point. This work has been done at a cost of \$16,706.64.

The new 10,000,000-gallon high-duty pumping engine furnished the city by H. R. Worthington, of New York, is now in position and practically completed. The official test will be made in a few days, when we shall know in what manner the terms of the contract have been complied with. The price to be paid, upon satisfactory completion, is \$35,700. With the completion of the engine the total capacity of the water works is 20,000,000 gallons in twenty-four hours; considerably more than the present system of well-supply will furnish the pumps.

Following the experience of 1890, the Water Board has during the year past prosecuted its experiments, in conjunction with the City Engineer, with an end in view to either improve our present supply of water or provide some new source. Plans are under consideration, but no definite steps to proceed with the work or to procure the result hoped for have been taken.

An examination of the map showing the system of water-mains in our streets, will show that there are localities where the present sized pipe is inadequate for fire fighting. There are dead ends which should not exist. Weakness of this nature should be remedied, and the water department can make no wiser use of money than by directing expenditures to this end. The Water Board is to be commended for work already

done in this direction; but work of this nature should be continued. No pains should be spared to make our street-hydrant service adequate, reliable and modern.

COMMONS AND PARKS.

The condition of our commons and parks shows an improvement over previous years. The cost in 1891 was \$11,785.81, which is \$3,373.42 less than the expenditures of the year 1890. The pest-hole at the lower end of the North Common has been filled up, new sidewalks and sewers have been laid, and that pleasure-ground is now safe and convenient for public travel, a condition in which it has not been during the winter months for many years. The improvements at our beautiful Fort Hill Park are steadily going on, and in a few years promise to make that place the most attractive of any public pleasure-ground in the State.

LIGHTING DEPARTMENT.

The total expenses of this department for the past year were \$55,876 50. There are 217 electric street lights, and 5 are located but not burning. These lights are furnished under contract executed in 1890 for three years, at the rate of forty cents per light per night for two hundred, and thirty-seven and one-half cents per light for all over that number. There are 912 gas lights for which the city pays prices according to size of light, and there are 456 gasoline lights, mostly located in the

outskirts of the city. Well lighted throughfares prevent crime and give the city a thrifty appearance. While there is a growing demand for more lights, care should be exercised, for in many instances the demand is based upon a fancied rather than a real necessity.

PAWTUCKET BOULEVARD.

There has been expended during the year 1891 the sum of \$25,130.00. Of this sum \$25,000 was raised by loan. The roadway is now nearly completed. The laying of the sidewalks and retaining wall next the river, beautifying the grounds, and providing suitable drainage, still remain to be done. The matter is in charge of the City Engineer and Committee on Streets who will probably finish the work during the present year.

CHARTER AND ORDINANCES.

For many years the feeling has been general that the Charter and Ordinances should be so changed as to make the chief executive the real, and not, as now, the nominal, head of the City Government. Desiring to meet this necessity, each year's City Council feels it incumbent upon itself to appoint a special committee on revision, and hire a clerk, and at the end of the year practically nothing has been done. It is assumed that the Mayor is the head of the government, and the

public generally hold him responsible for the conduct of affairs, when, as a matter of fact, his authority is very limited. The charter provides that he "shall be vigilant and active at all times in causing the laws for the government of the city to be duly enforced," and he "shall inspect the conduct of all subordinate officers in the government thereof, and as far as in his power cause all negligence, carelessness and violation of duty to be duly prosecuted and punished."

This is very indefinite; for, how can the Mayor cause laws to be enforced when he has no authority to enforce them, and there is no penalty for non-enforcement? And how shall he punish neglect of duty on the part of subordinates when he has no such power? Suppose, after he discovers neglect of duty on the part of a subordinate, the latter ignores any order or direction of the Mayor, as has been done, the Mayor is without authority in the premises, and the city suffers. In consequence of this lack of authority business principles cannot be successfully applied to the administration of city affairs. The sooner this matter is righted the better. It is of great importance that the present government push the revision of our Charter and Ordinances to a speedy termination.

PAUPER DEPARTMENT.

The demands in this department are steadily increasing. The total number of inmates now at the

Poor Farm show a very large increase over a year ago. The calls upon the Ambulance have become so numerous that a new wagon has been purchased, and the police telegraph has been connected with the Ambulance headquarters to secure speedy service. The work of this feature of the department is highly commended, for it is of incalculable value in removing the sick and maimed to the hospital or their homes.

The total expenditures of this department for the year have been \$77,955.71.

PUBLIC HEALTH.

This department is in charge of the Board of Health, composed of three members, two of whom are appointed by the Mayor, and the third is the City Physician. This Board is established under the statute laws of the State, and its duty is to prevent sickness and reduce the death-rate.

One year ago I called attention to the fact that the rate of mortality and the expenses of the department marched forward arm in arm since 1885, which was just cause for alarm on the part of our citizens. I am pleased to be able to say that during the past year the death-rate and expenses have been reduced, and that the work of the department has been systematized. The following interesting figures of the rate of mortality and the expenses of the Board since 1885 are submitted for your approval:

	DEATH-RATE.	EXPENSES.
1885	20 70	\$17,039 88
1886	23.27	18,659 00
1887	24 96	22,912 30
1888	24.51	25,098 84
1889	25.31	*30,773 61
1890	25.24	31,439 86
1891	24.37	30,127 28

*Deducting \$2,553 01 for bath-houses.

In this connection I desire to commend the zeal and efficiency of the present Milk Inspector. On the purity of the milk depends, in a large measure, the health of the people, especially the young, and no effort should be spared to punish violations of the milk laws. During the year a testing apparatus has been purchased, and the Inspector now makes his own analysis of milk, effecting quite a saving to the city.

POLICE DEPARTMENT.

In proportion to its population, the City of Lowell stands among the first in the Commonwealth in maintaining its Police Department. The people pay cheerfully, and in return they expect an efficient department. This I think we have. Our department is singularly free from scandals. The discipline of the force is well maintained. Outside of the administration of the liquor laws, over which there always has been and will be controversy, the laws have been enforced. Criminals have been apprehended and punished, and good order has been maintained, so that every citizen feels secure in possession of life and property.

The most severe criticisms that have come to my notice are those with reference to the liquor laws, and many of these criticisms were evidently made for political effect. Suspicions and irresponsible statements have no force in a law court, nor can the police act on them unless they are definite and truthful. The liquor laws are many and complex. It is almost impossible to enforce them to the strict letter, and the political conditions in Lowell are such that they intermingle to some extent with the administration of the laws, and embarrass the officers in the strict and impartial performance of duty. This latter evil is not confined to any one party, but to both.

With one or two exceptions, the regular licensed places of the past year have been well conducted. They have not violated the laws but have done business in a proper manner. The evils of the traffic have been wholly with the "speak easies" and bogus drug stores, which seem to be the natural offsprings of a congested license system. How to cure this evil is a difficult problem, which I trust you will handle fearlessly and vigorously. The best interests of the community demand it. The whole force of the government should be brought to bear against this evil, for the best interests of law, order and the city's good name. The first remedy lies in granting the various classes of licenses; the second in the enforcement of the laws. A partial and spasmodic enforcement will not do, for that encourages violations, with the final result of fine and

imprisonment to the violators. I believe that the wisest course to pursue is to enforce the liquor laws not in a spirit of fanaticism or persecution, but with fairness to all, having it thoroughly understood that the violators will be punished on any and all occasions when the evidence is sufficient to convict.

The force is now made up of ninety men, comprising one chief, two deputies, three sergeants, seventy-five patrolmen and nine reserve men.

The total expenditures for this department for 1891 were \$96,092.85.

LICENSES.

At the last municipal election, a majority vote was cast in favor of granting licenses for the sale of intoxicating liquors for the year beginning May 1, 1892.

By this vote the people have expressed their wishes on this important subject, and at the same time they elected a Board of Aldermen who, by the laws of the Commonwealth, become the licensing board for the City. The citizens have said by their votes, cast independently and intelligently, and after careful consideration and full and free discussion alike by pulpit and press upon the question, that they believed it to be advisable to grant licenses.

The Board of Aldermen is by law clothed with the power of granting these licenses. Here ends the responsibility of the people and begins that of the Board of Aldermen.

The Board of Aldermen have some discretionary power in the granting of licenses, and this should be used with a view of reducing the great evil of intemperance to a minimum; and now the very important question is at hand, how can this best be accomplished?

To attain this desired result, I recommend that a high price be fixed for all licenses granted, from the first to the fifth class inclusive; that the licensees may be made to feel an increased financial responsibility and therefore become aids to the Police Department in the strict enforcement of the law against illegal sales of liquors.

I also recommend that licenses of the sixth class (apothecaries' licenses) be granted only to genuine apothecaries, and should it become a difficult problem to determine whether or not a pharmacy is established or conducted as a legitimate drug store or simply to serve as a cover under which to conduct the sale of intoxicants, I then advise that a limit be fixed and that the number should not be greater than six to each ward in the city.

The issuance of this number of apothecaries' licenses would certainly supply all proper needs of liquor for medicinal and remedial purposes.

By this line of action, the city would receive a larger revenue, while by a rigid enforcement of the law against unlicensed sales, those licensed to sell would receive, as they are entitled to do, the fuller protection of the law, and kitchen bar-rooms, "speakeasies" and

bogus apothecaries be suppressed. As the Board of Aldermen is the licensing board, so also is it by law the board that has complete control of the Police Department and the enforcement of the liquor as well as of all other laws, and if the licenses are granted as suggested and the law rigidly enforced, as it can and should be, there will be a marked improvement in the condition of our community.

CONCLUSION.

One hundred years ago was formed "a body politic and corporate forever, by the name of the Proprietors of the Locks and Canals upon the Merrimack River, and while these men builded better than they knew, yet our city may be said to have made its start, when they, selecting this fair valley, located at the junction of these two rivers, dedicated it to commerce and to trade.

Standing here in this the centennial year of our city's history, looking backward we see what the founders of our city by their mechanical skill, inventive genius, and business sagacity, have accomplished. We view with admiration and with wonder the grand and successful outcome of their endeavors and their courage.

Successful almost beyond a parallel, nowhere has enterprise, vigor and art deserved or received a fuller reward. Great as has been the growth and advancement of Lowell, I believe it has by no means yet

reached its maximum, but that it offers for the present and future, opportunities as promising and rewards as great as those realized by its original builders.

As nothing can be more certain than that an unwise or dishonest administration of corporate affairs here, either public or private, would tend to repel outside capital or curtail the investment here of our own; so it is also sure that a wise and honest administration of all corporate affairs will tend to develop and enhance the interests of all.

Let us, then, remembering the work of those who have gone before; their honesty of purpose, their foresight, their public spirit in which they laid the foundation of that which is today committed to our charge and keeping; let us, then, highly resolve that by no act or deed of ours during the year that is to come shall that which they have built suffer harm at our hands.

But rather, that the city, its interests and welfare carefully guarded by us, shall continue its onward career, and that it shall be in the years to come, as it has been in the years that are past, the happy home of a prosperous people.



MUNICIPAL REGISTER:
CONTAINING
RULES AND ORDERS
OF THE
CITY COUNCIL,
AND A LIST OF
THE GOVERNMENT AND OFFICERS OF THE CITY OF LOWELL.
1892.



LOWELL, MASS.:
SUN PRESS: HARRINGTON BROS.
1892.

JOINT RULES AND ORDERS OF THE CITY COUNCIL.

1. In the month of January joint standing committees shall be appointed as follows:

- A COMMITTEE ON ACCOUNTS,
- A COMMITTEE ON CLAIMS,
- A COMMITTEE ON EDUCATION,
- A COMMITTEE ON THE FIRE DEPARTMENT,
- A COMMITTEE ON LANDS AND BUILDINGS,
- A COMMITTEE ON MILITARY AFFAIRS,
- A COMMITTEE ON ORDINANCES AND LEGISLATION,
- A COMMITTEE ON PRINTING,
- A COMMITTEE ON STREETS,
- A COMMITTEE ON COMMONS.

Each committee shall consist of two Aldermen and three members of the Common Council, except the Committee on Streets, which shall consist of two Aldermen and five members of the Common Council.

2. Each board shall, in such manner as it may determine, select its own members for any joint committee.

3. In all joint standing committees, except that on Finance, the member first named in the Board of Aldermen shall be chairman; on the Committee on Finance, the member first named in the Common Council shall be chairman; and in all joint special committees, the member first named in the board where the business originates shall be chairman, and shall call the committee together.

4. Reports of committees shall be made to the board first meeting after such reports are prepared and signed.

5. No committee shall act by separate consultation, and no report shall be received unless agreed to in committee actually assembled.

6. It shall be the duty of every joint committee (the Committee on Streets excepted), to whom any subject may be specially referred, to report thereon within five weeks, or ask for further time.

7. The by-laws of the city shall be termed ordinances; the enacting clause of which shall be—"Be it ordained by the City Council of the City of Lowell, as follows:"

8. An ordinance may originate in either board, and shall be considered in three several stages. It shall first be read for information, and the question shall then be on ordering it to a second reading; but if it has not previously been in the hands of some joint committee, it shall first be so referred. When reported back, the recommendations of the committee shall first be acted on. If it shall then be ordered to a second reading, it shall next be examined by a standing committee of that board, who shall see that it is drawn in proper form. When returned by such committee, the question shall be on ordering it to be enrolled. If so ordered, it shall then be sent to the other board, where the same order of proceeding shall be observed. When it has been ordered by both branches to be enrolled, it shall be enrolled by the Clerk of the Common Council, and shall be by him submitted to the proper committee of that board, to ascertain if it has been correctly enrolled. If so reported, the question shall be on passing it to be ordained. If it shall so pass, it shall be signed by the President of the Common Council, and be sent to the Board of Aldermen, where it shall take a like course. If passed to be ordained in that board, it shall be signed by the Chairman of the Board of Aldermen, and be sent to the Mayor for his approval.

9. Every joint resolution shall be read in the board in which it is introduced, and the question shall be upon ordering it to a second reading. If so ordered, the question shall then be upon its passage. If passed, it shall be sent to the other board, where the order of proceeding shall be the same. When passed by both boards, the resolution shall be presented to the Mayor for his approval, and when the same shall be in force, shall be enrolled by the Clerk of the Common Council, and when found correctly enrolled as provided in the case of an ordinance it shall be signed by the President of the Common Council and the Chairman of the Board of Aldermen, and be presented to the Mayor for his signature, if he approved the original.

10. Joint orders shall require but one reading, and when adopted, shall be sent to the Mayor for his approval, except when they relate to a question of a convention of the two branches, or the election of any officer.

11. An ordinance may be rejected in any stage, but may not pass through all its stages in the same day.

12. Every appropriation of money exceeding fifty dollars shall be by resolution.

13. Each board shall transmit to the other all papers on which any ordinance, joint resolution, or order, shall be founded; and all papers, on their passage between the two boards, shall be under the signature of their respective clerks, except ordinances and joint resolutions in their last stage, which shall be signed by the presiding officers. If papers come before either board which have been duly acted upon in the other board, the presiding officer shall so state without reading the endorsements of the clerk, unless the latter are called for.

14. All enrolled ordinances shall be written in a fair and legible hand, without interlineations or erasures, and no enrolled ordinance or resolution shall be amended.

15. When either board does not concur with the other in any ordinance or resolution sent from the other, notice of such non-concurrence shall be given by a written message.

16. In any case of non-concurrence, each board may appoint a Committee of Conference. Such committee shall consist, in each case, of three members who support the vote of their own board. These two committees may meet jointly or separately, and a majority of each shall decide its action.

17. No committee shall enter into any contract with any of its members, or purchase, or authorize the purchase of, any article therefrom.

18. No chairman of any committee shall audit or approve any bill or account against the city, for any supplies or services, which shall not have been ordered or authorized by the committee.

19. All reports and other papers submitted to the City Council shall be written in a fair hand, without endorsement, except in case of the introduction of an order or resolution. In such case, the member introducing an order or resolution shall subscribe his name at the bottom of the back of the same. All other endorsements upon the back of papers shall be made by the clerk; and the clerks of the boards respectively shall, on seasonable notice, make copies of any papers to be reported by committees, at the request of the respective chairmen thereof.

20. No business shall be transacted by the City Council in convention, except such as shall have been previously agreed on, unless by unanimous consent.

21. After the annual appropriations shall have been passed, no subsequent expenditure shall be authorized for any object, unless provision for the same shall be made by a specific transfer from some of the appropriations contained in the annual resolution, or by expressly creating therefor a city debt; but no such debt shall be created unless the resolution authorizing the-

same pass by the affirmative votes of two-thirds of the whole number of each branch of the City Council, said votes to be taken by yeas and nays, excepting in cases of appropriations for the providing of armories for the use of military companies, for the celebration of holidays, and for other purposes of a public nature, when a vote of two-thirds of the members of each branch of the City Council present and voting shall be sufficient; but the amount of such appropriations named in this clause shall not exceed one-fiftieth part of one per cent. of the valuation of the city for the same year.

22. In ballotings in joint convention, blanks shall not be counted.

23. When both boards are in session at the same time, neither shall adjourn without giving notice to the other of its intention.

24. Reports of city officers, after being presented, shall remain in the office of the City Clerk two weeks before being printed.

25. All papers, of whatever description, relating to business requiring concurrent action of both boards of the City Council must be presented to the City Clerk, or the Clerk of the Common Council, not later than noon on the day the meeting is to be held. Petitions, reports or other papers, presented after that hour will not be taken up for action thereon until the next meeting.

26. These rules may be suspended for a specific purpose, or amended, whenever twenty-two members of a joint convention of the two branches shall so direct, or whenever a joint order to that effect shall be passed by the votes of six members of the Board of Aldermen and sixteen members of the Common Council.

RULES AND ORDERS OF THE BOARD OF ALDERMEN.

1. At the appointed time the presiding officer shall take the chair, and, on the appearance of a quorum, proceed to business.

2. The order of business shall be as follows:—

First.—At all regular meetings the journal of the last regular meeting and all intervening meetings of the board, shall be approved without reading, unless the reading be called for by some member of the board.

Second.—Petitions and similar papers.

Third.—Appointments, elections, etc.

Fourth.—New business, which, unless otherwise ordered, will take its place at the foot of the Orders of the Day.

Fifth.—Orders of the Day, consisting of unfinished business of the last previous meeting, papers from the Common Council, and such matters as have been introduced as new business. By a vote of six members, any matters in the Orders of the Day, may at any time be taken up for immediate consideration.

3. The presiding officer shall decide all points of order, subject to appeal. He may read while sitting, but must rise to put a question. He shall allow debate on a question until the vote has been declared, but not on the verification of a vote; and on a demand of two members, shall take every vote by yeas and nays.

4. When a question is under debate, the presiding officer shall receive no motion but to adjourn, to take up a special

assignment, to lay on the table, to postpone to a day certain, to commit, to amend, or to postpone indefinitely. These several motions shall have precedence in the foregoing order, and debate upon any of them shall be confined to the actual motion, and shall not go into the merits of the main question, except on amendment.

5. When a vote has passed, except for adjournment or to lay on the table, any member voting with the majority may move a reconsideration, to be acted upon at the same meeting. Any member voting with the minority may move a reconsideration, to be acted upon at the next meeting which latter motion shall have priority, if made before the motion first mentioned shall have been decided. No motion shall be twice reconsidered.

6. No member shall be interrupted while speaking, but by a call to order, or for the correction of a mistake; nor shall there be any conversation among the members while a paper is being read or a question stated from the chair.

7. When any member is about to speak in debate, he shall rise in his place and respectfully address the presiding officer, shall confine himself to the question under debate, and avoid personality.

8. In the month of January the following committees shall be appointed:—

- A COMMITTEE ON BILLS IN SECOND READING,
- A COMMITTEE ON ELECTRIC WIRES,
- A COMMITTEE ON ENROLLMENT,
- A COMMITTEE ON LICENSES,
- A COMMITTEE ON LIGHTING STREETS,
- A COMMITTEE ON POLICE,
- A COMMITTEE ON REPAIRS OF STREETS,
- A COMMITTEE ON SEWERS,
- A COMMITTEE ON WEIGHTS AND MEASURES,
- A COMMITTEE ON STATE AID.

The Committees on Licenses, on Police, on Sewers and on Electric Wires shall consist of three members each; the other committees shall be composed of two each.

9. Every member present shall be held obliged to vote on all questions, and not to leave without permission, if his presence is necessary to make a quorum.

10. The clerk shall prepare for the use of the board, a copy of the Orders of the Day, to which shall be added a list of matters laid on the table or postponed to a day certain.

11. When a reference is proposed to more than one committee the question shall first be upon a standing committee of the board, then a special committee, then a joint standing committee and last a joint special committee.

12. These rules may be amended or suspended whenever two-thirds of the members present may so vote; but a motion to amend shall not be made and finally acted upon at the same meeting.

13. All petitions for the appointment or removal of police officers and watchmen shall, before action thereon is taken by the board, be referred to the Committee on Police.

14. All nominations of persons to serve as police officers and watchmen shall, before action thereon by the board, be referred to the Committee on Police, who shall report upon such nominations at or before the next regular meeting after such reference.

15. All papers, of whatever description, which may require action by this board, shall be presented to the City Clerk not later than the hour of noon on the day of each regular meeting. Petitions, reports and other papers, presented after that hour on such day, will not be considered until the next meeting.

RULES AND ORDERS OF THE COMMON COUNCIL.

1. The President shall take the chair precisely at the hour appointed for the meeting, call the members to order, and within ten minutes (or sooner, if a quorum be present,) he shall cause the roll to be called, and the names of absentees recorded. The first business after the roll-call shall be the approval of the records of the previous meeting, which shall be approved without reading, unless their reading be called for by some member. In the absence of the President the oldest member present shall call the Council to order, and preside until a President *pro tempore* be chosen.

2. He shall preserve order and decorum; may speak to points of order in preference to other members, rising from his seat for that purpose, and shall decide questions of order subject to an appeal to the Council by any member.

3. He shall rise to address the Council, to state facts, but may put questions, or read, sitting.

4. He shall declare all votes; but if a vote be doubted, the President shall, without further debate, require the members voting in the affirmative and negative to rise and stand until they are counted, and he shall declare the result.

5. He may call any member to the chair, but such substitution shall not extend beyond an adjournment, and when out of the chair, the President may express his opinion on any subject under debate, and he shall not resume the chair while the same question is pending.

6. All questions shall be propounded in the order in which they are moved, unless the subsequent motion be previous in its nature.

7. After a motion is stated by the President, it shall be disposed of by a vote of the Council, unless the mover withdraw it before a decision or amendment.

8. A motion to adjourn shall always be in order; that and the motion to lay on the table shall be decided without debate.

9. The previous question shall be in this form: "Shall the main question be now put?" It shall only be admitted when demanded by a majority of members present, and, until it is decided, shall preclude all amendment and further debate of the main question.

10. The yeas and nays shall be taken on any question upon the request of one-third of the members present.

11. When two or more members happen to rise at the same time, the President shall name the member who shall speak first.

12. When any member is about to speak in debate, or deliver any matter to the Council, he shall rise in his place and respectfully address the presiding officer, confining himself to the question under debate, and avoid personality.

13. No member shall be mentioned in debate by his name, but may be described by the place he sits in, or such other designation as may be intelligible and respectful.

14. No member speaking shall be interrupted by another, but by a call to order or to correct a mistake. If any member, in speaking or otherwise, transgresses the Rules of the Council, the President shall, or any member may, call him to order; in which case the member so called to order shall immediately be seated, until the question of order is decided. If the decision be in favor of the member called to order he shall be at liberty to proceed; if otherwise, he shall not proceed without the leave of the Council.

15. No member shall speak more than twice to the same question without obtaining leave of the Council.

16. Whilst the President or any member is speaking none shall stand up or pass unnecessarily before the person speaking.

17. Every motion shall be reduced to writing, if the President or any member require it.

18. When a question is under debate, no motion shall be received but to adjourn, to lay on the table, for the previous question, to postpone to a certain day, to commit, to amend, or to postpone indefinitely; which several motions shall have precedence in the order in which they are arranged; and no motion to postpone or commit shall be allowed twice in the same day, in the same stage of the ordinance or proposition.

19. When a vote has passed, except for adjournment or to lay on the table, any member voting with the majority may move a reconsideration, to be acted upon at the same meeting. Any member voting with the minority may move a reconsideration, to be acted upon at the next meeting; which latter motion shall have priority, if made before the motion first mentioned shall have been decided. No motion shall be twice reconsidered.

20. Every member who shall be in the Council when a question is put shall give his vote, unless the Council, for special reasons, excuse him.

21. No motion or proposition, on a subject different from that under consideration, shall be admitted under color of an amendment.

22. All reports may be committed or recommitted at the pleasure of the Council.

23. The division of a question may be called for when the sense will admit of it.

24. When the reading of a paper is called for and objected to, it shall be determined by a vote of the Council.

25. No standing order of the Council shall be suspended, unless three-fourths of the members present consent thereto; nor shall any rule or order be repealed or amended without one day's notice being given of the motion therefor, nor unless a majority of the whole Council concur therein.

26. All committees, except such as the Council determine to select by ballot, shall be nominated by the President.

27. No member shall be obliged to serve on more than two committees at the same time, or be chairman of more than one.

28. All memorials and other papers addressed to the Council shall be presented by the President, or by a member in his place, who shall explain the subject thereof; and they shall be taken up in the order in which they were presented, unless the Council shall otherwise direct.

29. Standing committees shall be appointed on the following subjects:—

ON SECOND READING OF BILLS AND ORDINANCES,

ON ENROLLMENT,

ON ELECTIONS AND RETURNS.

30. No committee shall sit during the sittings of the Council without special leave, except the Committee on the Second Reading of Bills and Ordinances and the Committee on Enrollment.

31. The rules of proceeding in the Council shall be observed in the Committee of the Whole, so far as they are applicable except the rule limiting the time of speaking.

32. When a committee is nominated by the chair, the person first named shall be chairman. In election of committees by ballot, when a chairman is not specially chosen, the person having the highest number of votes shall act as chairman; and in case of an equality in votes between two or more members of a committee, the members thereof shall choose a chairman.

33. All ordinances and resolutions shall have two several readings before they shall be finally passed by this Council.

34. All ordinances before being read a second time, shall be referred to the Committee on the Second Reading of Bills and Ordinances, and after being reported upon by said committee, shall be again read, after which second reading the question shall be on passing the same to be enrolled.

35. No ordinance or resolution imposing penalties, or authorizing the expenditure of money, shall have more than one reading the same day.

36. The seats of the Common Council shall be numbered and determined by lot, and no member shall change his seat but by permission of the President.

37. All committees of the Council shall consist of three members, unless a different number be specially ordered; and no report shall be received from any committee unless agreed to in committee actually assembled; and all reports shall be in writing.

38. It shall be the duty of every committee of the Council, to whom any subject may be specially referred, to report thereon within five weeks, or ask for further time.

39. The clerk shall keep brief minutes of the votes and proceedings of the Council, entering thereon all accepted resolutions; shall notice reports and memorials, and other papers submitted to the board, only by their titles, or a brief description of their purport.

40. All salary officers shall be chosen by written or printed ballots; and in the election of any officers by ballot, blanks shall not be counted.

41. Members of the Council may attend meetings of any of its committees, but shall not vote thereat.

42. The clerk of the Common Council shall keep the record of committees who may require that service; and on the appointment of every standing committee, a book for records shall be

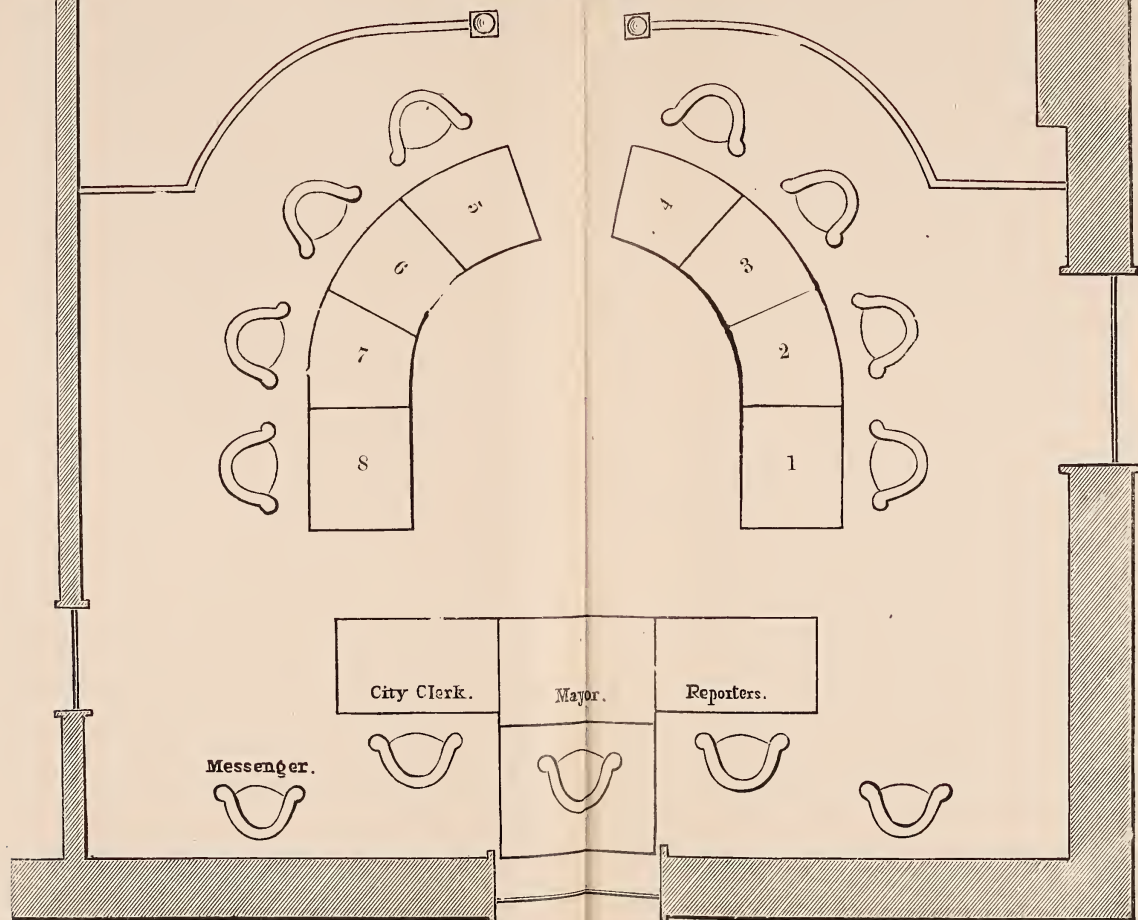
provided by its chairman, or by said clerk. The clerk shall have the custody of all minutes by him kept; and the records of the several committees shall be open to the inspection of the members of the City Council.

43. Any member offering a resolution shall write his name on the bottom of the back of such resolution.

44. With the exception of an order for a joint convention, any joint order originating in the Common Council shall be copied, and shall, previous to the hour for calling the meeting to order, be posted in some prominent place in the Council Chamber, where it may be open to the inspection of the members.

PLAN OF ALDERMEN'S ROOM

LOWELL, MASS.



GEORGE W. FIFIELD,
Mayor.

- 1—ALBERT A. HAGGETT.
- 2—FRANK E. STOWELL.
- 2—WILLIAM J. COUGHLIN.
- 4—STEPHEN J. JOHNSON.

- 5—JAMES W. CASSIDY.
- 6—CHARLES F. VARNUM.
- 7—SAMUEL D. BUTTERWORTH.
- 8—FREEMAN W. PUFFER.

MICHAEL J. DOW, *Clerk.*
CHARLES HOWARD, *Chief of Police.*

CITY GOVERNMENT FOR 1892.

MAYOR:

GEORGE W. FIFIELD.

576 Middlesex Street.

BOARD OF ALDERMEN.

ALBERT A. HAGGETT.....	<i>Chairman.</i>
SAMUEL D. BUTTERWORTH.....	113 Moore Street
JAMES W. CASSIDY.....	Mt. Grove Street
WILLIAM J. COUGHLIN.....	37 Grove Street
ALBERT A. HAGGETT.....	55 Nesmith Street
STEPHEN J. JOHNSON.....	76 Suffolk Street
FREEMAN W. PUFFER.....	6 Thirteenth Street
FRANK E. STOWELL.....	Rogers, near Nesmith Street
CHARLES F. VARNUM.....	Smith Street
MICHAEL J. DOWD.....	<i>Clerk.</i>

COMMON COUNCIL.

THOMAS J. SPARKS..... *President.*

Ward One.

JOHN BRUNETTE.....	9 Lagrange Street
JAMES O'NEILL.....	27 Jefferson Street
JOSEPH O'ROURKE.....	254 Market Street
JOHN J. SULLIVAN.....	30 Marion Street

Ward Two.

ADOLPHE BENARD.....Aiken Street and Lakeview Avenue
 GEORGE H. MARSTON.....207 Bridge Street
 FRANK SCOTT.....52 Boott Corporation
 HUGH A. THOMPSON.....101 Coburn Street

Ward Three.

PATRICK J. BAXTER.....4 Cedar Street
 JOHN J. GILBRIDE.....408 Central Street
 THOMAS J. SPARKS.....145 Lawrence Street
 WILLIAM H. STAFFORD.....18 Lyon Street

Ward Four.

EDWIN L. GILES.....22 Foster Street
 FRED HORNE.....128 Westford Street
 WALLACE G. PARKIN.....7 Lane Street
 MOSES WYMAN.....31 Hamilton Corporation

Ward Five.

CONSTANT HENOTTE.....16 James Street
 PATRICK H. KEHOE.....27 Cushing Street
 JOSEPH A. McDONALD.....72 Fletcher Street
 CHARLES W. SWAN.....West Side Mt. Hope Street

Ward Six.

WILLIAM T. BENSON.....152 Lawrence Street
 JAMES J. DOLAN.....18 Concord Street
 THOMAS F. HOBAN.....38 Andover Street
 MICHAEL F. MCCARTHY.....43 Lawrence Street
 DAVID CHASE.....*Clerk.*

MEETINGS OF THE CITY COUNCIL.

The regular meetings of the City Council are held at the City Hall as follows:—

Board of Aldermen.

January.....	5 and 19	July.....	5 and 19
February....	2 and 16	September....	6 and 20
March.....	1 and 15	October.....	4 and 18
April.....	5 and 19	November.....	1 and 15
May.....	3 and 17	December.....	6 and 20
June.....	7 and 21		

At 7.30 P. M.

Common Council.

January.....	12 and 26	July.....	12 and 26
February.....	9 and 23	September.....	13 and 27
March.....	8 and 22	October.....	11 and 25
April.....	12 and 26	November.....	8 and 22
May.....	10 and 24	December....	13 and 27
June.....	14 and 28		

At 8 P. M.

JOINT STANDING COMMITTEES. OF THE CITY COUNCIL.

FINANCE—The Mayor and Alderman Haggett; Councilmen Dolan, Marston and Sullivan.

APPROPRIATIONS—The Mayor and Aldermen Stowell, Varnum, Haggett and Butterworth; Councilmen Stafford, Baxter, Horne and Brunette.

ACCOUNTS—Aldermen Cassidy and Coughlin; Councilmen Horne, Gilbride and Baxter.

CLAIMS—Aldermen Johnson and Puffer; Councilmen Kehoe, O'Rourke and Giles.

COMMONS—Aldermen Coughlin and Puffer; Councilmen Hoban, Stafford and Benard.

EDUCATION—Aldermen Johnson and Varnum; Councilmen Hoban, Brunette and Horne.

FIRE DEPARTMENT—Aldermen Cassidy and Stowell; Councilmen Baxter, O'Neill and McCarthy.

LANDS AND BUILDINGS—Aldermen Varnum and Cassidy; Councilmen Parkin, McDonald and Sullivan.

MILITARY AFFAIRS—Aldermen Butterworth and Haggett; Councilmen O'Rourke, Henotte and Wyman.

ORDINANCES AND LEGISLATION—Aldermen Haggett and Puffer; Councilmen Dolan, Parkin and Sullivan.

PRINTING—Aldermen Johnson and Cassidy; Councilmen Kehoe, Brunette and Parkin.

STREETS—Aldermen Stowell and Coughlin; Councilmen Dolan, Gilbride, Marston, Swan and Benson.

STANDING COMMITTEES OF THE BOARD OF ALDERMEN.

BILLS IN SECOND READING—Aldermen Cassidy and Varnum.

ELECTRIC WIRES—Aldermen Puffer, Stowell and Johnson.

ENROLLMENT—Aldermen Cassidy and Johnson.

LICENSES—Aldermen Haggett, Butterworth and Johnson.

LIGHTING STREETS—Aldermen Puffer and Stowell.

POLICE—Aldermen Haggett, Johnson and Butterworth.

REPAIRS OF STREETS—Aldermen Coughlin and Stowell.

SEWERS—Aldermen Butterworth, Varnum and Coughlin.

STATE AID—Aldermen Butterworth and Haggett.

WEIGHTS AND MEASURES—Aldermen Varnum and Puffer.

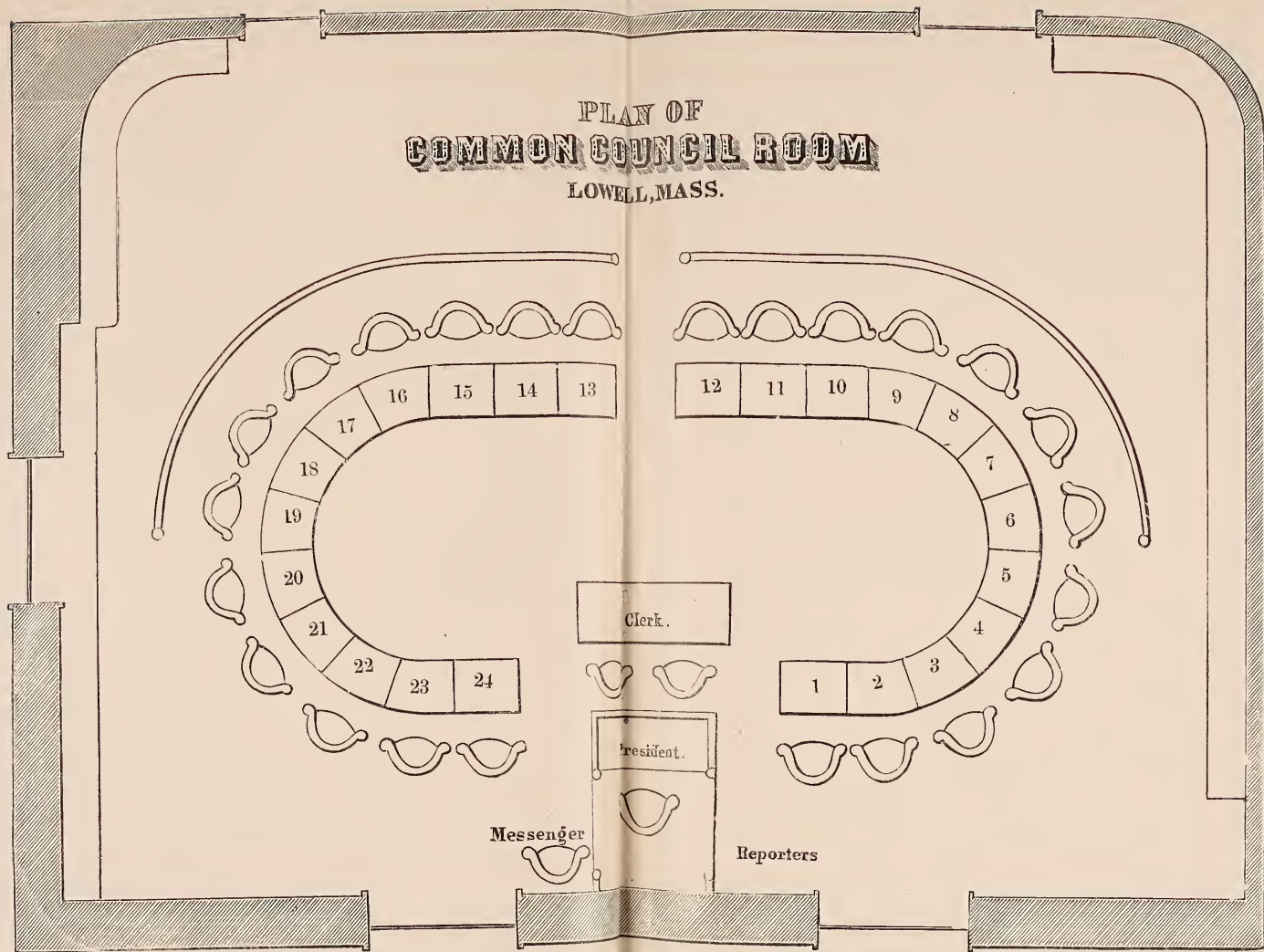
STANDING COMMITTEES OF COMMON COUNCIL.

BILLS IN SECOND READING—Councilmen Henotte, Scott and Brunette.

ELECTIONS AND RETURNS—Councilmen Thompson, Stafford and Wyman.

ENROLLMENT—Councilmen Scott, Henotte and Gilbride.

PLAN OF
COMMON COUNCIL ROOM
LOWELL, MASS.



THOMAS J. PARKS, *President.*

- 1—GEORGE H. MARSTON.
- 2—MOSES WYMAN.
- 3—HUGH A. THOMPSON.
- 4—ADOLPHE BENARD.
- 5—WALLACE G. PARKIN.
- 6—FRANK SCOTT.

- 7—EDWIN L. GILES.
- 8—FRED HORNE.
- 9—JOHN BRUNETTE.
- 10—WILLIAM H. STAFFORD.
- 11—CONSTANT HENOTTE.
- 12—JOSEPH A. McDONALD.

- 13—VACANT.
- 14—THOMAS F. HOBAN.
- 15—JOHN J. GILBRIDE.
- 16—PATRICK J. BAXTER.
- 17—JOSEPH O'ROURKE.
- 18—JOHN J. SULLIVAN.

- 19—CHARLES W. SWAN.
- 20—MICHAEL F. MCCARTHY.
- 21—PATRICK H. KEHOE.
- 22—JAMES O'NEILL.
- 23—WILLIAM T. BENSON.
- 24—JAMES J. DOLAN.

DAVID CHASE, *Clerk.*
JAMES HILL, *Messenger.*

CITY OFFICERS, 1892.

CITY CLERK.

MICHAEL J. DOWD.....Office, City Hall

Chosen by the City Council in convention in January. City Charter, Sect. 17.

CITY TREASURER AND COLLECTOR OF TAXES.

AUSTIN K. CHADWICK.....Office, City Hall

Chosen by the City Council in convention in January. City Charter, Sect. 17.

AUDITOR OF ACCOUNTS.

DAVID CHASE.....Office, City Hall

Chosen by concurrent vote in January or February. Ord., Chap. 2, Sect. 1.

SUPERINTENDENT OF STREETS.

ROBERT E. CROWLEY.....Office, City Hall

Chosen by concurrent vote in January or February. Ord., Chap. 35, Sect. 1.

SURVEYORS OF HIGHWAYS.

Alderman FRANK E. STOWELL; Councilmen CHARLES W. SWAN
and GEORGE H. MARSTON.

Chosen by concurrent vote in January or February. City Charter, Sect. 17; Ord., Chap. 35, Sect. 1.

CIVIL ENGINEER FOR THE CITY.

GEORGE BOWERS.....Office, City Hall
Chosen by concurrent vote in January or February. Ord., Chap. 13, Sect. 1.

CITY MESSENGER.

JAMES H. CAHILL.....Office, City Hall
Chosen by concurrent vote in January. Ord., Chap. 10, Sect. 1.

CITY SOLICITOR.

JOHN J. HOGAN.....Office, Central Street
Chosen by concurrent vote in January or February. Ord., Chap. 11, Sect. 2.

LIBRARIAN OF THE CITY LIBRARY.

FREDERICK A. CHASE.....Office at the Library
Chosen by the Board of Trustees of the City Library.

TRUSTEES OF THE CITY LIBRARY.

GEORGE W. FIFIELD, Mayor, <i>Ex-Officio</i>	Chairman
LARKIN T. TRULL.....	Secretary
FRANK P. PUTNAM.....	Term Expires 1893
GEORGE F. RICHARDSON.....	“ “ 1894
LARKIN T. TRULL.....	“ “ 1895
STEPHEN J. JOHNSON.....	“ “ 1896
PHILIP J. FARLEY.....	“ “ 1897

Appointed by the Mayor in December.
Regular meeting last Tuesday in each month.

SUPERINTENDENT OF PUBLIC BUILDINGS.

RICHARD BRAY....Office, City Hall, entrance City Hall Avenue
Chosen by concurrent vote in January or February. Ord., Chap. 5, Sect. 1.

CITY PHYSICIAN.

WILLIAM P. LAWLER.....Office, Board of Health

Appointed by the Mayor and Aldermen in January, 1891, for three years. Public Statutes Chap. 80, Sect. 15.

SUPERINTENDENT OF BURIALS.

FREDERICK A. BATES.....Office, Board of Health

Chosen by concurrent vote in January or February. Ord., Chap. 4, Sect. 1.

ASSESSORS OF TAXES.

Office, City Hall, Third Floor.

ABEL WHEELER.....Term Expires 1893

NATHAN D. PRATT....." " 1894

JOHN P. MAHONEY....." " 1895

ABEL WHEELER.....*Chairman.*

NATHAN D. PRATT.....*Secretary.*

STEPHEN J. KIRBY.....*Clerk.*

Chosen by concurrent vote in January or February, one member retiring annually. Ord. 1890.

ASSISTANT ASSESSORS OF TAXES.

WARD 1.....MICHAEL J. GARVEY

" 2.....ROBERT L. READ

" 3.....JOHN E. MAGUIRE

" 4.....C. ARTHUR ABBOTT

" 5.....AVILA BOURBONNIERE

" 6.....FRED N. EDGELL

Term expires first Monday in January, 1893. Nominated by the Mayor and confirmed by the Board of Aldermen biennially. Ord. 1890.

OVERSEERS OF THE POOR.

Office, City Hall, corner City Hall Avenue and Merrimack Street.

GEORGE W. FIFIELD, Mayor.....*Ex-Officio*

JOHN J. KEEFE.....Term Expires 1892

CHARLES L. MARREN....." " 1892

JOHN J. DONOVAN....." " 1892

JOHN NOLAN.....	Term Expires	1893
JAMES GOOKIN.....	“	“ 1893
JOSEPH DEXTRA.....	“	“ 1893

GEORGE W. FIFIELD.....*Chairman.*

CHARLES H. RICHARDSON.....*Secretary.*

Chosen for two years in January, one-half retiring annually. City Charter, Sect. 29.
Regular meeting last week-day of the month, at City Farm.

Secretary's office, City Hall, corner City Hall Avenue and Merrimack Street. Office hours, 9 A. M. to 3 P. M. Applications for relief in the forenoon only.

JAMES F. WALSH and NELLIE A. KEYES, *Clerks.*

List of Committees.

ACCOUNTS—Marren, Dextra, Keefe.

AGRICULTURE—Donovan, Keefe, Dextra.

OUTDOOR RELIEF—Mayor, Dextra, Donovan.

CARE AND REPAIR OF BUILDINGS—Gookin, Nolan, Keefe.

CLOTHING—Keefe, Gookin, Donovan.

PROVISIONS AND SUPPLIES—Mayor, Nolan, Gookin.

DISPENSARY—Nolan, Gookin, Marren.

WOOD YARD—Dextra, Nolan, Marren.

Ward Physicians.

WARD 1—	L. J. McDONOUGH.....	159	Worthen Street
“ 2—	A. J. HALPIN.....	14	Central Street
“ 3—	J. W. GRADY.....	228	Central Street
“ 4—	W. G. EATON.....	195	Middlesex Street
“ 5—	W. A. JOHNSON.....	19	Kirk Street
“ 6—	CHARLES H. RICKER.....	2	Wymans Exchange

City Dispensary.

Police Building.....Market Street

JOSEPH W. LITCH, *Clerk.*

Open week days—9 A. M. to 1 P. M., and 2.30 to 6.30 P. M.

Open Sundays—8 to 10 A. M., and 2 to 4 P. M.

Dispensary Physicians.

Doctors Colton, Ricker, Grady, Spalding, Viles, W. A. Johnson, Patterson, Willard, McDonough, Eaton, Frye and Halpin.

DR. CHAS. H. RICKER, *Secretary*.

INSTITUTIONS AND OFFICERS AT CITY FARM.

The institutions consist of the Almshouse, a Workhouse used for the imprisonment of certain convicts, and "The House for the Employment and the Reformation of Juvenile Offenders in the City of Lowell." The farm embraces about one hundred and twenty-five acres, seventy-five of which are in a high state of cultivation.

ALBERT PINDER, *Superintendent*.

WILLIAM A. LANG, *Teacher and Chaplain*.

Appointed by the Overseers of the Poor, annually, at last meeting in December.

MEMBERS OF THE LOWELL WATER BOARD.

Office, City Hall.

MILES F. BRENNAN.....*President*.

From the Board of Aldermen: JAMES W. CASSIDY.

From the Citizens:

ARTHUR F. SALMON.....	Term expires	1893
EDWARD W. THOMAS.....	" "	1894
MILES F. BRENNAN.....	" "	1895
RICHARD B. ALLEN.....	" "	1896

CHARLES L. KNAPP, *Clerk*.

ROBERT J. THOMAS, *Superintendent*.

The members of the Lowell Water Board are chosen by concurrent vote in January or February.
The Superintendent is chosen in March by the Board.
The Clerk is chosen by the Board. Ord. amending Chap. 39 of the Revised Ordinances.

COMMISSIONERS OF SINKING FUND.

JAMES C. ABBOTT.....	Term expires	1893
HENRY G. CUSHING.....	“ “	1894
PETER F. CONATON.....	“ “	1895
AUSTIN K. CHADWICK, <i>Secretary and Treasurer.</i>		

The Commissioners are elected under the provisions of Chapter 29 of the Public Statutes Sect. 10.

BOARD OF CIVIL SERVICE EXAMINERS.

JOHN J. COLTON, M. D., CHARLES H. CONANT, JOSEPH SMITH.
CHARLES H. CONANT, <i>Secretary.</i>

FIRE DEPARTMENT, 1892-93.

The Chief Engineer is appointed by the Mayor and Aldermen in the month of March or April, for the term of three years from the first day of May next succeeding.

The Assistant Engineers are appointed annually by the Mayor and Aldermen in the month of March or April, for the term of one year from the first day of May next succeeding. All other members of the Fire Department are nominated by the Board of Engineers, and appointed by the Mayor and Aldermen; and vacancies may be filled.

City Charter, Sect. 31; Ord., Amending Chap. 20, Sect. 1; Pub. Stat., Chap. 35.

Chief Engineer.

EDWARD S. HOSMER.....	12 Livermore Street
Office, Engine House, Middle Street.	

Assistant Engineers.

JAMES F. NORTON.....	18 Ames Street
GEORGE F. SALMON.....	24 Mt. Washington Street
EDWARD MELOY.....	68 Charles Street
HENRY W. BURTON.....	4 Kimball Avenue
JAMES F. NORTON, <i>Clerk of the Board.</i>	

The Clerk is chosen by the Engineers.

Operator of the Fire-Alarm Telegraph

G. B. WHITNEY.....Residence, 80 Middle Street

Committee on Fire Department.

Aldermen CASSIDY and STOWELL; Councilmen BAXTER,
O'NEILL and MCCARTHY.

POLICE DEPARTMENT.

City Charter, Sect. 19; Ord., Chap. 28; Chap. 279, Acts of 1867.

The members of this Department, except the Chief of Police, are appointed by the Mayor and Aldermen as police officers and watchmen, with all the powers of constables, except the power of serving and executing civil process, and hold their offices during the pleasure of the Board of Aldermen.

Police Roll.

CHARLES HOWARD, Chief of Police.....34 Livingston Street
 JAMES A. MCQUADE, Sen. Deputy.....95 Concord Street
 GEORGE R. DAVIS, Jun. Dep. Chief of Police...11 Huntington Street
 FRANK GOODWIN, Inspector of Police (Liquor)...115 Appleton Street
 DANIEL M. HAYES, Inspector of Police.....
 CHARLES LAFLAMME, Inspector of Police.....120 School Street
 MICHAEL E. McDONALD, Inspector of Police....76 High Street
 DAVID J. DONALDSON, Inspector of Police....47 Pleasant Street
 REDMOND WELCH, JR., Inspector of Police.....8 North Street
 JAMES DUNLAVY, Sergeant of Police.....119 Cross Street
 WILLIAM R. KEW, Sergeant of Police.....65 Princeton Street
 JAMES E. WEBSTER, Sergeant of Police....205 Westford Street
 JACOB G. FAVOR, Warrant Officer.....65 Chelmsford Street
 PETER CAWLEY, Warrant Officer.....46 Appleton Street
 ISAAC L. LIBBY, Court Officer and Janitor.....11 Coral Street
 JAMES McLAUGHLIN, Keeper.....170 Stackpole Street

Patrolmen.

ALLEN, THOMAS E.....16 West Street
 BLOOD, JOSIAH S.....10 Coral Street

BOYLE, JAMES.....	126	Lakeview Avenue
BRADY, PATRICK H.....	34	London Street
BREAULT, ELOI N.....	122	School Street
BROSNAN, JAMES.....	99	Concord Street
BUCHANAN, JOHN.....	60	Beech Street
BUMPS, WILLIAM G.....	3	Durant Street
CLEMENT, HORACE W.....	27	Hildreth Street
COLLINS, CORNELIUS E.....	14	Ames Street
CONNORS, MARTIN.....	34	Pond Street
CORCORAN, PETER T.....	160	High Street
CREAHIN, JOHN.....	335	West Pine Street
CROWLEY, JOHN B.....	222	Market Street
CROWLEY, JOHN J.....	18	Walnut Street
DENNETT, JOHN S.....	3 and 4	Mass. Corp.
DOW, JAMES E.....	87	Coburn Street
DOWNNEY, HUGH.....	9	Chestnut Street
DUNFEY, JOHN M.....		Fourth Avenue
DURROUGH, JOHN.....	6	Fay Street
FARRINGTON, HENRY.....	5	Coral Street
FITZPATRICK, PATRICK.....	20	West Pine Street
FOX, EDWARD.....		Lawrence Street
FOX, FRANK.....	58	Newhall Street
FURLONG, JOHN C....	141	School Street
GALLIVAN, JOHN F.....	120	School Street
GARDNER, WILLIS L.....	16	Billings Street
GOODHUE, DAVID H.....	163	School Street
GRADY, WILLIAM H....	15	Lundberg Street
GREGG, CHARLES.....	58	Fort Hill Avenue
GRINNELL, ENOCH N.....	46	Appleton Street
HICKSON, JOHN.....		Mammoth Road
HOLLAND, JAMES E.....		Mammoth Road
HOLMAN, ALFRED M.....	1	Powell Street
HOWARD, CORNELIUS.....	67	Whipple Street
HUBIN, JOHN D.....	8	Chapel Street
INGALLS, LINDSEY E.....	113	Coburn Street

INGALLS, THOMAS.....	25	West Fourth Street
JONES, WILLIAM B.....	101	Branch Street
LEIGHTON, JOHN L.....	4	Horn Street
LENNON, MICHAEL J.....	12	Pleasant Street
LANE, DANIEL W.....	18	Nichols Street
LIBBY, ALBERT E.....	39	Eighteenth Street
McKENZIE, JOHN R.....	11	Arlington Street
MARSHALL, GEORGE W.....		Parker Street
McINTEE, CORMACK.....	73	Fulton Street
McKAY, JOHN H.....	27	Cady Street
McNABB, JAMES.....		Mammoth Road
MOFFATT, WILLIAM B.....	33	London Street
MOORE, FRANCIS E.....	237½	Middlesex Street
O'BRIEN, WILLIAM H.....	332	Middlesex Street
O'CONNELL, JOHN.....	71	Congress Street
O'DONNELL, PETER F.	19	Cabot Street
PAGE, ALONZO J.....	286	Westford Street
PALMER, GEORGE B.....		Aiken Avenue
PROVENCHER, NAPOLEON.....	118	Central Street
QUINN, HENRY F.....	106	River Street
RILEY, JAMES.....	65	Pleasant Street
RYDER, CHESTER E.....	58	South Whipple Street
SANBORN, THOS. J.....	86	Grove Street
STOWELL, ROBERT.....	119	Lawrence Street
TILTON, HERMON N.....	12	Whipple Street
WALSH, JOHN A.....	11	Third Avenue
WHITNEY, FRANK H.....	59	Fremont Street
WHITTAKER, JOHN T.....	23	Robinson Court

RESERVE POLICE.

BREEN, DENNIS J.....	1	Cushing Street
CURRAN, PETER.....	75	Worthen Street
DUNCAN, ALEXANDER,..	260	Gorham Street
FOX, JOHN W.....	52	Chambers Street
HEEREN, CHARLES J.....	19	Tyler Street

HURLEY, JAMES F.....	Pawtucketville
KEEFE, MICHAEL J.....	259 Broadway
MARKHAM, JAMES.....	13 Burns Street
MULREY, JOHN J.....	84 Fletcher Street
O'CONNELL, MICHAEL.....	44 Lyons Street

KEEPER OF LOCK UP.

CHARLES HOWARD.

MATRON.

MARGARET WALLACE.....10 William Street

DRIVERS OF PATROL WAGON.

J. H. HOWARD.

J. W. TILTON.

HOSTLER.

J. W. KILBURN.

CONSTABLES.

HARRISON W. STREETER.

JAMES E. WEBSTER.

FREDERICK A. BATES.

JOHN P. SEARLE.

CHARLES HOWARD.

JOSEPH S. LAPIERRE.

FRANK GOODWIN.

GEORGE B. PALMER.

OSWALD LAPIERRE.

GEORGE R. DAVIS.

D. J. DONALDSON.

JAMES F. DUNLAVEY.

JACOB G. FAVOR.

JOHN B. SWIFT.

W. R. KEW.

ISIDORE TURCOTTE.

ISAAC L. LIBBY.

CHARLES LAFLAMME.

SIMON B. HARRIS.

DAVID FITZGERALD.

MICHAEL H. MCCUE.

AUGUSTE GUILLETT.

JOHN A. MCQUADE.

MICHAEL E. McDONALD.

EDWARD J. NOYES.

JAMES H. CAHILL.

DANIEL M. HAYES.

MICHAEL J. O'BOYLE.

PETER CAWLEY.

JAMES A. MCQUADE.

EDWARD R. DONOVAN.

JAMES B. TRUEWORTHY.

City Charter, Sect. 19; Ord., Chap. 37, Sect. 2.

POLICE COURT.SAMUEL P. HADLEY.....*Standing Justice*JOHN J. PICKMAN, }
JOHN F. FRYE, }*Special Justices*JAMES F. SAVAGE.....*Clerk*

HEALTH COMMISSIONER.

CHARLES HOWARD.....Office, Police Station

Chosen by concurrent vote by nomination commencing in the Board of Aldermen, in January or February. Ord., Chap. 37, Sect. 1.

BOARD OF HEALTH.

CHARLES R. COSTELLO, 1891-'92.

JAMES B. FIELD, M. D., 1892-'93.

WILLIAM P. LAWLER, City Physician, *Ex-Officio*.CHARLES R. COSTELLO, *Chairman*.

Appointed by the Mayor and Board of Aldermen in January. Chap. 80, Pub. Stat. Sect. 8; Ord., Chap. 22, Sect. 1.

BOARD OF REGISTRARS OF VOTERS.

JOHN B. COLEMAN.....Term Expires May 1, 1892

ABBOTT LAWRENCE....." " " 1893

CHARLES H. MCINTIRE....." " " 1894

MICHAEL J. DOWD, City Clerk, *Ex-Officio*.CHARLES H. MCINTIRE, *Chairman*.

Chap. 423, Sect. 18, Acts of 1890.

FENCE VIEWERS.

SIMON B. HARRIS. LEROY C. HALL. JOSHUA M. HADLEY

Chosen by concurrent vote by nomination commencing in the Board of Aldermen, in January or February. Ord., Chap. 37, Sect. 1.

FIELD DRIVERS.

W. H. GRADY.

W. R. KEW.

JAMES DUNLAVEY.

JAMES E. WEBSTER.

Chosen by concurrent vote commencing in the Board of Aldermen in January or February. Ord., Chap. 37, Sect. 1.

POUND KEEPER.

LAWRENCE J. THYNE.

Chosen by concurrent vote by nomination commencing in the Board of Aldermen, in January or February. Ord., Chap. 37, Sect. 1.

SEALER OF WEIGHTS AND MEASURES.

NATHANIEL E. ANNIS.....265 Middlesex Street

Appointed by the Board of Aldermen by nomination in March or April. Pub. Stat. Chap. 65, Sect. 8; Acts of 1882, Chap. 42.

INSPECTOR OF MILK AND VINEGAR.

THOMAS O. ALLEN..Office, Board of Health, 76 Merrimack Street

Appointed by the Board of Aldermen by nomination in January or February. Ord., Chap. 37, Sect. 2.

**INSPECTOR OF PROVISIONS AND OF ANIMALS INTENDED
FOR SLAUGHTER OR KEPT FOR THE
PRODUCTION OF MILK.**

THOMAS O. ALLEN, Office, Board of Health, 76 Merrimack Street.

Appointed by the Mayor and Aldermen annually in April. Acts of 1892, Chap. 195, Sect. 1; amending Pub. Stat., Chap. 58, Sect. 1.

INSPECTOR OF PETROLEUM OILS.**THOMAS O. ALLEN.**

Appointed by the Mayor and Aldermen. Pub, Stat., Chap. 59, Sect. 6.

INSPECTORS OF BOILERS.**RICHARD DOBBINS**.....Office, Tanner Street**BARTHOLOMEW SCANNELL**.....Office, 36 Tanner Street**JAMES A. READY**.....

Pub. Stat. Chap. 102, Sect. 49.

INSPECTORS OF PROVISIONS.**FREDERICK A. BATES**.....Office, Board of Health**GEORGE R. DAVIS**.....Office, Police Station**DANIEL W. LANE**.....“ “ “**JAMES E. WEBSTER**.....“ “ “

Appointed by the Mayor and Aldermen. Pub. Stat., Chap. 58, Sect. 1.

FISH WARDEN.**OREN C. CARLTON**.....Office, 52 First Street

Appointed by the Mayor and Board of Aldermen. Pub. Stat., Chap. 91, Sect. 2.

**MEASURER OF WOOD AND BARK—SUPERINTENDENT OF
CITY SCALES—INSPECTOR OF BALE OR BUNDLE HAY.****RICHARD J. NOONAN**.....Office at City Scales, rear Market
House Building.

Appointed by the Board of Aldermen in January or February. Ord., Chap. 40, Sect. 1.

**MEASURERS OF WOOD AND BARK BROUGHT BY WATER
OR RAILROAD CARS INTO THE CITY.****JOHN F. BATEMAN.****JOSEPH HOVEY.**

Appointed by the Board of Aldermen in January or February. Ord., Chap. 40, Sect. 1.

MEASURERS OF WOOD AND BARK.

EDWIN E. AREY.....	Tannery, Ayer's City
EDMUND BRICKETT.....	
JAMES F. CHOATE..	
ETHAN D. CUTTING.....	
PATRICK COURTNEY.....	City Yard
ROBERT E. CROWLEY.....	City Yard
WILLIAM H. HARRIGAN.....	City Yard
CHARLES E. GUTHRIE.....	
CYRUS F. HILL.....	Lowell Machine Shop
JOSEPH HOVEY.....	
ALBERT PUFFER.....	
HARRY L. STANLEY.....	63 Moody Street
HENRY J. WILLIAMS.....	

Appointed by the Board of Aldermen in January or February. Ord., Chap. 40, Sect. 1.

MEASURERS OF GRAIN.

WILLIS J. HILL.	FRANK H. PARKER.
GEORGE W. TILTON.	HENRY J. WILLIAMS.

Fees, 2 1-2 mills a bushel for measuring. Appointed by the Board of Aldermen in January or February. Ord. Chap. 37, Sect. 2.

MEASURERS OF UPPER LEATHER.

EDWIN E. AREY.	WILLARD A. BROWN.
ROBERT BOOTH.	WILLIAM H. WHITE.

Appointed by the Board of Aldermen in April, Ord. Chap. 37, Sect. 2.

SURVEYORS OF LUMBER.

ALFRED P. BATEMAN.	EDWARD LATOUR.
JOHN F. BATEMAN.	ORESTES M. PRATT.
FREDERICK CONANT.	GEO. E. LEAVITT.
LEO. A. MILLER.	CHARLES D. ROBINSON.
GEORGE A. ROPER.	CLARENCE O. ESTABROOK.
GUILFORD D. FARLEY.	GEORGE C. HATCH.

M. B. McDONALD.

EPHRAIM SIMONDS.

DANIEL R. McDONALD.

JOHN VAN TASSEL.

ALBERT I. GILMAN.

A. B. WOODWORTH, JR.

CYRUS F. HILL.

L. A. BRAYNARD

JOHN H. HUNTLEY.

CHARLES S. FLANDERS.

JOHN LARNED.

Chosen by concurrent vote by nomination commencing in the Board of Aldermen in January or February. Ord. Chap. 37, Sect. 1.

SURVEYORS OF PLASTERING, BRICK OR STONE WORK AND PAINTING.

JOHN F. BATEMAN.

WILLIAM A. FAVOR.

ORIN F. OSGOOD.

ORA M. SNELL.

ALDEN B. ILSLEY.

HENRY O. BROOKS.

JOSEPH HOVEY.

GEORGE BOWERS.

ALBERT E. LYFORD.

MALVIN B. SMITH.

PHILIP H. ILSLEY.

Appointed by the Board of Aldermen in January or February. Ord. Chap. 37, Sect. 2.

WEIGHERS OF HAY AND OTHER ARTICLES.

ROBERT E. CROWLEY.....City Stables

EDMUND BRICKETT, at Scales cor. Western Ave. and Fletcher Street

PATRICK H. BURNS.....

CLARENCE G. COBURN.....Scales Pawtucket Square

PATRICK COURTNEY.....City Stables

JOHN DOYLE.....

LEROY C. HALL.....Dutton Street

L. E. HARMON.....

WILLIAM H. HARRIGAN.....City Stables

CYRUS F. HILL.....Lowell Machine Shop

ALBERT PUFFER.....

HARRY L. STANLEY.....63 Moody Street

FRANK C. NICHOLLS.....

JOHN J. GOOKIN.....

Appointed by the Board of Aldermen in January or February. Ord. Chap. 21, Sect. 1.

WEIGHERS OF COAL.

EDWARD CAWLEY.	C. B. KITCHEN.
JAMES CAWLEY.	ALBERT PUFFER.
JAMES F. CHOATE.	HARRY L. STANLEY.
PATRICK COURTNEY.	WILLIAM H. DONOVAN.
DENNIS E. CONNORS.	EDWARD E. DREWETT.
ROBERT E. CROWLEY.	GEORGE W. FARNHAM.
EDWARD F. CONNORS.	HENRY K. GATES
JOHN DOYLE.	CHARLES B. RUSHWORTH.
DANIEL W. HORNE.	JOSEPH SCOTT.
FRED HORNE.	DANIEL T. SULLIVAN.
ANNIE ENGLAND.	JAMES SWAN.
WILLIAM H. HARRIGAN.	JOHN WARBURTON.
THOMAS J. KENNEDY.	HERBERT R. WHITE.
GARDNER W. KING.	SYDNEY W. WIGGIN.

Appointed by the Board of Aldermen in January or February. Ord., Chap. 37, Sect. 2.

JANITOR OF HUNTINGTON AND JACKSON HALLS.

GEORGE B. MEVIS.

Appointed by the Mayor.

SCHOOL COMMITTEE 1892.

GEORGE W. FIFIELD.....*Chairman.*

GEORGE M. HARRIGAN.....*Vice-Chairman.*

ARTHUR K. WHITCOMB.....*Secretary.*

GEORGE W. FIFIELD, Mayor..... } *Ex-*
 THOMAS J. SPARKS, President of the Common Council... } *Officiis*

145 Lawrence Street.

Ward 1—PATRICK KEYES, JR.,..... Term Expires 1892

213 Market Street.

LAWRENCE CUMMINGS,..... “ “ 1893

61 Adams Street.

Ward 2—WILLIAM H. LATHROP..... “ “ 1892

15 First Street.

FREDERICK T. WALSH..... “ “ 1893

N. E. Side Eleventh Street.

Ward 3—EDWARD GALLAGHER..... “ “ 1892

Sun Office.

GEORGE M. HARRIGAN..... “ “ 1893

Office Lowell Trust Co.

Ward 4—RANSOM A. GREENE..... “ “ 1892

25 Walker Street.

FRED WOODIES..... “ “ 1893

Office of L. M. Shop.

Ward 5—ANDREW G. SWAPP..... “ “ 1892

187 Pawtucket Street.

WALTER COBURN..... “ “ 1893

19 Congress Street.

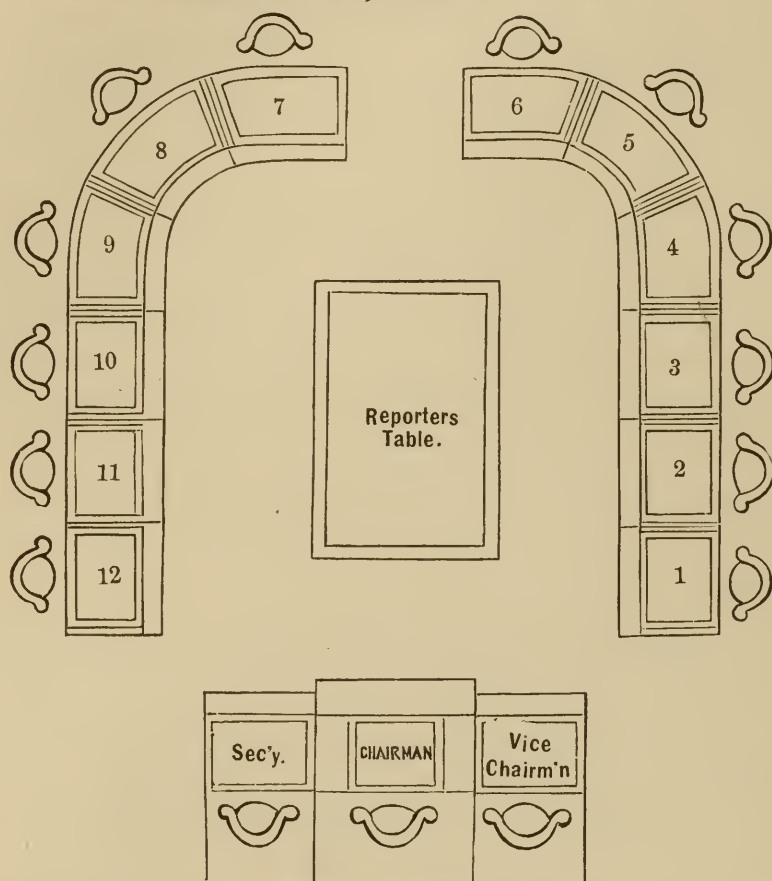
Ward 6—ALMON W. HILL..... “ “ 1892

20 Middlesex Street.

THOMAS P. BOULGER..... “ “ 1893

9 Everett Street.

PLAN OF
SCHOOL COMMITTEE ROOM
LOWELL, MASS.



GEORGE W. FIFIELD, *Mayor.*

GEORGE M. HARRIGAN, *Vice-Chairman.*

ARTHUR K. WHITCOMB, *Secretary.*

1—WM. H. LATHROP.

2—LAWRENCE CUMMINGS.

3—WALTER COBURN.

4—RANSOM A. GREENE.

5—FRED WOODIES.

6—ANDREW G. SWAPP.

7—FREDERICK T. WALSH.

8—THOMAS P. BOULGER.

9—ALMON W. HILL.

10—PATRICK KEYES, JR.

11—EDWARD GALLAGHER.

12—THOMAS J. SPARKS.

STANDING COMMITTEES.

- ON ACCOUNTS—The Mayor, Messrs. Woodies, Harrigan, Walsh and Boulger.
- ON SCHOOL HOUSES AND HYGIENE—Messrs. Cummings, Hill, Gallagher, Lathrop, Boulger.
- ON TEACHERS AND TRAINING SCHOOL—Messrs. Swapp, Greene, Harrigan, Coburn, Keyes.
- ON REPORTS AND PRINTING—Messrs. Lathrop, Greene, Gallagher, Walsh, Boulger.
- ON BOOKS AND SUPPLIES—Messrs. Harrigan, Woodies, Keyes, Hill, Boulger, Lathrop.
- ON SALARIES—The Mayor, Messrs. Cummings, Greene, Coburn, Walsh.
- ON PENMANSHIP AND DRAWING—Messrs. Woodies, Cummings, Hill, Gallagher, Walsh.
- ON MUSIC—Messrs. Keyes, Woodies, Greene, Harrigan, Boulger.
- ON EVENING SCHOOLS—Messrs. Greene, Cummings, Swapp, Hill, Keyes.
- ON RULES AND REGULATIONS—Messrs. Coburn, Keyes, Swapp, Cummings, Walsh.
- ON MILITARY INSTRUCTION—Messrs. Hill, Coburn, Gallagher, Harrigan, Lathrop.
- ON PRIVATE SCHOOLS—The Mayor, Messrs. Swapp, Gallagher, Lathrop, Walsh.
- ON SEWING—Messrs. Gallagher, Keyes, Harrigan, Coburn, Woodies.

REGULAR MEETINGS OF THE SCHOOL COMMITTEE.

January.....	25	July.....	25
February.....	29	August.....	29
March.....	28	September.....	26
April.....	25	October.....	31
June.....	1	November.....	28
June.....	27	December.....	26

SUPERINTENDENT OF PUBLIC SCHOOLS.

ARTHUR K. WHITCOMB.....Office in City Government Building.

OFFICE HOURS: One hour after the forenoon session of the schools, and from 2 to 3 o'clock, Saturday afternoon.

TRUANT COMMISSIONERS.

BICKFORD LANG.

JOHN F. WILLIAMS.

JAMES KELLEY.

Office in City Government Building.

ASSIGNMENT OF SCHOOLS.

THE MAYOR—Reform School.

MR. SPARKS—Reform, Middlesex Village and Ames Street.

MR. KEYES—High, Reform, Worthen Street and Cheever Street.

MR. CUMMINGS—High, Greene and Morrill.

MR. LATHROP—Varnum and Fourth Street.

MR. WALSH—Kirk Street, West Sixth Street, Tenth Street and Lakeview Avenue.

MR. GALLAGHER—London Street, Weed Street, Cottage Street and Chapel Street.

MR. HARRIGAN—High, Butler, Agawam Street and Lyon Street.

MR. GREENE—High, Edson, Elliot, Dover Street and Powell.

MR. WOODIES—Highland, Franklin, Howard Street and Grand Street.

MR. SWAPP—High, Bartlett, Cabot Street and School Street.

MR. COBURN—High, Pawtucket, Mammoth Road, Cross Street, Plain Street and Varnum Avenue.

MR. HILL—High, Moody, Charles Street and Central Street.

MR. BOULGER—High, Pond Street, High Street, Carter Street, Fayette Street and Sycamore Street.

POPULATION OF THE CITY OF LOWELL.

Year.	Population.	Year.	Population.	Year.	Population.	Year.	Population.
1828	3,532	1837	18,010	1855	37,554	1875	49,688
1830	6,477	1840	20,981	1860	36,827	1880	59,485
1832	10,254	1844	25,163	1865	30,990	1885	64,107
1833	12,963	1846	29,127	1866	36,878	1890	77,696
1836	17,633	1850	33,383	1870	40,928	....	.....

POPULATION, LEGAL VOTERS ETC., BY WARDS.

Wards.	Popula- tion, 1890.	Registered Voters, Dec. 1890.	Pre- cints.	Regist'd Voters, Dec. 1891.			Vote for Mayor, '91	
				Males	Females.	Total.	Fifield.	Palmer.
1	11,398	Males 1,541 Females 0	1	494	0	1523	863	449
			2	499	0			
			3	530	0			
2	13,189	Males 1,953 Females 28	1	334	3	1984	695	950
			2	706	17			
			3	922	2			
3	14,298	Males 2,341 Females 2	1	722	0	2431	1300	762
			2	923	0			
			3	786	0			
4	12,860	Males 2,240 Females 7	1	533	1	2299	755	1252
			2	717	1			
			3	1043	4			
5	15,967	Males 1,869 Females 23	1	607	6	1968	875	854
			2	624	0			
			3	706	25			
6	9,984	Males 1,991 Females 150	1	720	21	2127	971	841
			2	574	39			
			3	727	46			
Total	77,696	*12,145	12167	165	12,332	5,459	5,108

*Males, 11,935; Females, 210.

CATALOGUE
OF THE
GOVERNMENT OF THE CITY OF LOWELL,
IN
CHRONOLOGICAL ORDER OF SERVICE,

From its Institution, 1836, to 1891, inclusive.

1836.**Mayor:****ELISHA BARTLETT.****Aldermen:**

William Austin, resigned Oct. 10,
Joseph Tapley, elected November,
Seth Ames,
Aaron Mansur,

Benjamin Walker,
Oliver M. Whipple,
Alexander Wright.

SAMUEL A. COBURN, *City Clerk.*

Common Council:

John Clark, *President*,
Henry J. Baxter,
Jonathan Bowers,
George Brownell,
James Cook,
David Dana,
Erastus Douglass,
Josiah B. French,
Cyril French,
Samuel Garland,
Horatio W. Hastings,
Horace Howard,

Stephen Mansur,
John Mixer,
Thomas Nesmith,
David Nourse,
Thomas Ordway,
James Russell,
John A. Savels,
Sidney Spalding,
Weld Spalding,
Jonathan Tyler,
Tappan Wentworth,
William Wyman.

GEORGE WOODWARD, *Clerk*, died. ALBERT LOCKE, elected.

1837.**Mayor:****ELISHA BARTLETT, † '36.****Aldermen:**

Seth Ames, * '36,
John Aiken,
Seth Chellis,

Joseph G. Kittredge,
Joshua Swan,
Alexander Wright, * '36.

SAMUEL A. COBURN, *City Clerk.*

Common Council:**WARD 1.**

Joshua Abbott,
James K. Fellows,
Jesse Phelps,
Walter Wright.

WARD 2.

William Fiske,
Thomas Nesmith, '36.
Josiah Osgood,
Joseph Tyler.

WARD 3.

Joseph M. Dodge,
Elisha Huntington, *President*,
William North,
Joseph Tapley.

WARD 4.

William Baker,
Elijah M. Read,
Charles H. Wilder,
William W. Wyman.

WARD 5.

George Brownell, '36,
Osgood Dane,
James Russell, '36.
Tappan Wentworth, '36.

WARD 6.

Andrew Bird,
Benjamin H. Gage,
Jona. T. P. Hunt,
Abram Tilton.

ALBERT LOCKE, *Clerk.*

The figures without other marks indicate membership of the Common Council those years.
† Mayor that year. * Alderman that year. ‡ President of Common Council that year.

1838.

Mayor:**LUTHER LAWRENCE.****Aldermen:**

Benjamin F. French,
Charles L. Tilden,
Oliver M. Whipple, * '36,

George H. Carleton,
George Brownell, '36, '37,
Seth Chellis, * '37.

THOMAS ORDWAY, *City Clerk.*

Common Council:**WARD 1.**

Jesse Phelps, '37,
Walter Wright, '37,
Eliphalet Brown,
Perez Fuller.

WARD 2.

William Fiske, '37.
Aaron H. Sherman,
William Upham,
Henry J. Baxter, '36.

WARD 3.

Thomas Hopkinson,
Elisha Huntington, ‡ '37, *President*,
Horace Howard, '36,
John Mixer, '36.

WARD 4.

David Dana, '36,
Perley Hale,
Benjamin Walker, * '36,
William Baker, '37.

WARD 5.

Garret J. Bradt,
Benjamin Wilde,
Erastus Douglass, '36,
Rufus Paul.

WARD 6.

Eli Cooper,
Thomas L. Randlett,
James L. Foot,
Calvin Goodspeed.

ALBERT LOCKE, *Clerk.*

1839.

Mayor:**LUTHER LAWRENCE. — [Died in April.]****ELISHA HUNTINGTON, ‡ '37, ‡ '38.****Aldermen:**

Benjamin F. French, * '38,
John O. Green,
Charles L. Tilden, * '38,

George H. Carleton, * '38,
John Clark, ‡ '36,
Oliver M. Whipple, * '36, * '38.

THOMAS ORDWAY, *City Clerk.*

Common Council:**WARD 1.**

Walter Wright, '37, '38,
Harlin Pillsbury,
Eliphalet Brown, '38,
Forrest Eaton.

WARD 2.

Jonathan Tyler, '36,
John Nesmith,
Henry J. Baxter, '36, '38,
Jefferson Bancroft.

WARD 3.

Thomas Hopkinson, '38, *President*,
Jacob Robbins,
John G. Locke.

WARD 4.

Benjamin Walker, * '36, '38,
Samuel Horn,
Stephen Carleton,
Stephen Mansur, '36.

WARD 5.

Tappan Wentworth, '36, '37,
Lewis McIntire, died Feb., '40,
Benjamin Wilde, '38,
Garret J. Bradt, '38.

WARD 6.

Thomas L. Randlett, '38,
Joseph S. Holt,
John L. Fitts,
Daniel Knapp.

ALBERT LOCKE, *Clerk.*

1840.**Mayor:**

ELISHA HUNTINGTON, †'37, †'38, †'39.

Aldermen:Jonathan Tyler, '36, '39,
John R. Adams,
Joseph Bedlow,Harlin Pillsbury, '39,
Seth Ames, *'36, *'37,
Stephen Mansur, '36, '39.THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**Forrest Eaton, '39,
Sylvanus Adams,
Henry Patch,
R. M. Hutchinson.**WARD 2.**Jefferson Bancroft, '39,
John Nesmith, '39,
Joseph G. Kittredge, *'37,
Josiah Osgood, '37.**WARD 3.**Pelham W. Warren, *President*,
Abner W. Buttrick,
Asa Hall,
Samuel Burbank.**WARD 4.**Ferdinand Rodliff,
Ethan Burnap,
Edward F. Watson,
B. Walker, *'36, '38, '39, died Sept.**WARD 5.**Tappan Wentworth, '36, '37, '39,
Samuel W. Brown,
John J. Crane,
George Dane.**WARD 6.**Daniel Knapp, '39,
George L. Fitts, '39,
Joseph Battles,
Joshua Converse.ALBERT LOCKE, *Clerk*, died October. JOHN G. LOCKE, elected October.**1841.****Mayor:**

ELISHA HUNTINGTON, †'37, †'38, †'39, †'40.

Aldermen:Seth Chellis, *'37, '38,
Jefferson Bancroft, '39, '40,
Cyril French, '36,George H. Carleton, *'38, *'39,
John R. Adams, *'40.
John Aiken, *'37.THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**Henry Patch, '40,
George Bragdon,
John W. Holland,
Arnold Welch.**WARD 2.**William Fiske, '37, '38
Erasmus D. Leavitt,
Jonathan White,
Nathaniel Wilson.**WARD 3.**Samuel Burbank, '40,
Nathaniel Critchett,
Royal Southwick,
Edward Winslow.**WARD 4.**Ethan Burnap, '40,
William Livingston,
John Morrison,
Edward F. Watson, '40.**WARD 5.**Tappan Wentworth, '36, '37, '39,
'40, *President*,
Samuel W. Brown, '40,
John J. Crane, '40,
Phineas Whiting.**WARD 6.**Francis H. Bowers,
Isaac H. Cooper,
William Potter,
John Smith,JOHN G. LOCKE, *Clerk*.

1842.

Mayor:

NATHANIEL WRIGHT.

Aldermen:

Nathaniel Thurston,
 Jefferson Bancroft, '39, '40, '41,
 Cyril French, '36, * '41,

William Livingston, '41,
 Ithamar A. Beard,
 John W. Graves.

THOMAS ORDWAY, *City Clerk*.

Common Council:

WARD 1.

Jeremiah P. Jewett,
 John Hadley,
 James Townsend,
 Edward J. Payne.

WARD 2.

John Nesmith, '39, '40,
 Erasmus D. Leavitt, '41,
 Joseph W. Mansur, *President*,
 James Hopkins.

WARD 3.

Nathaniel Critchett, '41,
 Ira Spalding,
 John Mead,
 Asa W. Willoughby.

WARD 4.

John Morrison, '41,
 William Carlton,
 Oliver March,
 Josiah B. French, '36.

WARD 5.

James Patterson,
 Isaac Appleton,
 Josiah Seavey,
 Roswell Douglass.

WARD 6.

James Russell, '36, '37,
 Jonathan Kendall,
 Varnum A. Shed,
 Isaac N. Fitts.

JOHN G. LOCKE, *Clerk*.

1843.

Mayor:

NATHANIEL WRIGHT, † '42.

Aldermen:

Harlin Pillsbury, '39, * '40, res'd June,
 Henry C. Johnson,
 Cyril French, '36, * '41, * '42,

S. Spalding, '36, resigned in June.
 Joseph Griffin.
 Charles L. Tilden, * '38, '39.

THOMAS ORDWAY, *City Clerk*.

Common Council:

WARD 1.

Daniel Bixby,
 Edward J. Payne, '42,
 Hugh Cummiskey,
 Walter Wright, '37, '38, '39.

WARD 2.

Henry J. Baxter, '36, '38, '39,
 John P. Simonds,
 Pliny Lawton,
 Ben Osgood.

WARD 3.

John Mead, '42,
 Willard Brown,
 Ira Spalding, '42,
 Benjamin J. Gerrish.

WARD 4.

Otis Allen,
 Alfred Gilman,
 Oliver March, '42, *President*,
 William Carlton, '42.

WARD 5.

James Patterson, '42,
 David Bradt,
 John L. Tripp,
 Benjamin F. Holden,

WARD 6.

John B. McAlvin,
 Cyrus Battles,
 Sewall G. Mack,
 Charles F. Mitchell.

JOHN G. LOCKE, *Clerk*.

1844.**Mayor:**

ELISHA HUNTINGTON, †'37, †'38, †'39, †'40, †'41.

Aldermen:Henry Smith,
Selwin Bancroft,
O. M. Whipple, *'36, *'38, *'39,Edward F. Watson, '40, '41,
Joseph Griffin, *'43,
John Wright.THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**Forrest Eaton, '39, '40,
Gilman N. Nichols,
Hugh Cummiskey, '43,
David Healey.**WARD 2.**John P. Simonds, '43,
Ben Osgood, '43,
Amos Merriam,
John Clark, †'36, *'39, *President.***WARD 3.**Charles B. Coburn,
George Choate,
Isaac Scripture,
William C. Gray.**WARD 4.**Asa Wetherbee,
Abner W. Buttrick, '40,
Horatio G. F. Corliss,
Charles H. Wilder, '37.**WARD 5.**John L. Tripp, '43,
David Bradt, '43,
John Wright,
Nathaniel Wright, Jr.**WARD 6.**Sewall G. Mack, '43,
James Russell, '36, '37, '42,
Jonathan Kendall, '42,
Gilman Gale.JOHN G. LOCKE, *Clerk.***1845.****Mayor:**

ELISHA HUNTINGTON, †'37, †'38, †'39, †'40, †'41, †'44.

Aldermen:Henry Smith, *'44,
Selwin Bancroft, *'44,
O. M. Whipple, *'36, *'38, *'39, *'44,Edward F. Watson, '40, '41, *'44,
John C. Dalton,
Daniel Knapp, '39.THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**Gilman N. Nichols, '39,
Danforth P. Brigham,
Jonathan Adams,
Willard C. Welch.**WARD 2.**John P. Simonds, '43, '44,
Daniel Balch,
William Brown,
Daniel S. Richardson, *President.***WARD 3.**Isaac Scripture, '44,
William C. Gray, '44,
George Choate, '44,
Hapgood Wright.**WARD 4.**Abner W. Buttrick, '40, '44,
Asa Wetherbee, '44,
Charles H. Wilder, '37, '44,
Josiah Sawtell.**WARD 5.**Nathaniel Wright, Jr., '44,
Amos Hyde,
Edward Sherman,
James Fenno.**WARD 6.**Gilman Gale, '44,
John B. McAlvin, '43,
Samuel Fay, Jr.,
Lorenzo P. Wright.JOHN G. LOCKE, *Clerk.*

1846.**Mayor:****JEFFERSON BANCROFT**, '39, '40, *'41, *'42.**Aldermen:**

Henry Smith, *'44, *'45,
 Selwin Bancroft, '44, *'45,
 William C. Gray, '44, '45,
 Joseph Butterfield,

John C. Dalton, '45,
 D. Knapp, '39, *'45, resigned July,
 Isaac Cooper, '41, elected August.

THOMAS ORDWAY, *City Clerk*.**Common Council:****WARD 1.**

Gilman N. Nichols, '39, '45,
 Danforth P. Brigham, '45,
 Willard C. Welch, '45,
 Thomas S. Hutchinson.

WARD 2.

Daniel Balch, '45,
 William Brown, '45,
 Daniel S. Richardson, †'45, *President*,
 Zadock Rogers.

WARD 3.

Hapgood Wright, '45,
 Isaac Farrington,
 Joel Powers,
 Franklin Mead.

WARD 4.

Josiah Sawtell, '45,
 Solon Stevens,
 David J. Moody,
 William Fletcher.

WARD 5.

Amos Hyde, '45,
 Horatio G. F. Corliss, '44,
 Jonathan Bowers, '36,
 Charles M. Short.

WARD 6.

Lorenzo P. Wright, '45,
 John L. Fitts, '39, '40,
 Lewis Packard,
 Columbus J. Hubbard.

JOHN G. LOCKE, *Clerk*.**1847.****Mayor:****JEFFERSON BANCROFT**, '39, '40, *'41, *'42, †'46.**Aldermen:**

George Bragdon,
 Joseph Butterfield, *'46,
 Linus Child,
 James Fenno, '45,

Elisha Huntington, †'37, †'38,
 †'39, †'40, †'41, †'44, †'45,
 Sewall G. Mack, '43, '44,
 Stephen Mansur, '36, '39, *'40,
 Josiah Sawtell, '45, '46.

THOMAS ORDWAY, *City Clerk*.**Common Council:****WARD 1.**

William Conihe,
 James C. Crombie,
 David S. Bachelder,
 Jesse Huse.

WARD 2.

Samuel W. Brown, '40, '41,
 Hannibal Powers,
 William Newman,
 Otis L. Allen.

WARD 3.

Joel Powers, '46,
 Franklin Mead, '46,
 Isaac Farrington, '46,
 Samuel G. Davis.

WARD 4.

Joel Adams, *President*,
 Horatio Fletcher,
 Solon Stevens, '46,
 Stephen A. Coburn.

WARD 5.

Ignatius Tyler,
 Edward C. Johnson,
 Elihu Gates,
 Charles M. Short, '46.

WARD 6.

Thomas Wentworth,
 Isaac N. Parker,
 John R. Southwick,
 Isaiah Morse.

JOHN G. LOCKE, *Clerk*.

1848.**Mayor:**

JEFFERSON BANCROFT, '39, '40, *'41, *'42, †'46, †'47.

Aldermen:

David Dana, '36, '38,
Erastus Douglass, '36, '38,
Jacob Graves, resigned in June,
William Newman, '47,

Gilman N. Nichols, '39, '45, '46,
Daniel S. Richardson, †'45, †'46,
Josiah Sawtell, '45, '46, *'47,
O. M. Whipple, *'36, *'38, *'39, *'45.

THOMAS ORDWAY, *City Clerk.*

Common Council:**WARD 1.**

William Conihe, '47,
James C. Crombie, '47,
Jesse Huse, '47,
Gerry Wilson.

WARD 2.

Otis L. Allen, '47,
William H. Flagg,
John Nesmith, '39, '40, '42,
Hannibal Powers, '47.

WARD 3.

Alfred Gilman, '43,
Thomas Hopkinson, '38, '39, *President*,
Ransom Reed,
Nathaniel Critchett, '41, '42.

WARD 4.

John Avery,
Otis Allen, '43,
Abiel Rolfe,
Horace Howard, '36, '38.

WARD 5.

Ignatius Tyler, '47,
Elihu Gates, '47,
Edward C. Johnson, '47,
Charles M. Short, '46, '47.

WARD 6.

Thomas Wentworth, '47,
Isaac N. Parker, '47,
Jeremiah M. Currier,
Horace Parmenter.

JOHN G. LOCKE, *Clerk.*

1849.**Mayor:**

JOSIAH B. FRENCH, '36, '42.

Aldermen:

James B. Francis,
Cyril French, '36, *'41, *'42, *'43,
James H. B. Ayer,
Daniel D. Crombie,

Daniel Carter,
George Brownell, '36, '37, *'38,
Artemas L. Brooks,
Joseph Bedlow, *'40.

THOMAS ORDWAY, *City Clerk.*

Common Council:**WARD 1.**

Jesse Huse, '47, '48, resigned Feb.,
William A. Richardson, elected Mar.,
Gerry Wilson, '48,
John W. Smith,
Alfred S. Saunders.

WARD 2.

William H. Flagg, '48,
Ivers Taylor,
Isaac S. Morse, resigned,
Ambrose Lawrence.

WARD 3.

Alfred Gilman, '43, '48,
Elisha Davis,
James Dinsmoor,
Andrew C. Wheelock.

WARD 4.

Nathaniel B. Favor,
Caleb Crosby,
Ezekiel Wright,
Waldo A. Fisher.

WARD 5.

Maynard Bragg,
Joshua Decatur,
Abram T. Melvin,
W. W. Morse.

WARD 6.

William Lamson, Jr.,
Jeremiah M. Currier, '48,
George S. Wright,
John Aiken, *'37, *'41, *President.*

GEORGE A. BUTTERFIELD, *Clerk.*

1850.**Mayor:****JOSIAH B. FRENCH**, '36, '42, †'49.**Aldermen:**James H. B. Ayer, *'49,
Joseph Bedlow, *'40. *'49,
Daniel D. Crombie, *'49,
James B. Francis, *'49,Philip Hardy,
John Mixer, '36, '38,
Josiah G. Peabody,
James Townsend, '42.THOMAS ORDWAY, *City Clerk*.**Common Council:****WARD 1.**John W. Smith, '49,
Daniel R. Kimball,
James Watson,
Jonathan Smothers.**WARD 2.**Ivers Taylor, '49. *President*,
George Gardner,
Samuel Lawrence. 2d,
Samuel J. Varney.**WARD 3.**Jonathan Page,
John Tripp,
Fordyce Coburn,
Joshua Merrill.GEO. A. BUTTERFIELD, *Clerk*, res'd May.**WARD 4.**Abner W. Buttrick, '40. '44. '45,
Caleb Crosby, '49,
Benjamin Goddard,
Nathaniel B. Favor, '49.**WARD 5.**George P. Elliot,
William Fiske, '37, '38, '41,
George W. Worthen,
Maynard Bragg, '49.**WARD 6.**Albert Mallard,
Stephen P. Sargent,
George S. Wright, '49,
Wm. Lamson, Jr., '49, res'd May.

WM. LAMSON, JR., elected May.

1851.**Mayor:****JAMES H. B. AYER**, *'49, *'50.**Aldermen:**William Fiske, '37, '38, '41, '50,
Ambrose Lawrence, '49,
James Townsend, '42, *'50,
Philip Hardy, *'50,William North, '37,
Abiel Rolfe, '48,
Lucius A. Cutler,
Joshua Converse, '40.THOMAS ORDWAY, *City Clerk*.**Common Council:****WARD 1.**James Watson, '50,
Jonathan Smothers, '50,
Charles B. Coburn, '44,
Stephen Moar.**WARD 2.**Linus Child, *'47,
George Gardner, '50, *President*,
Samuel J. Varney, '50,
Zachariah B. Caverly.**WARD 3.**Fordyce Coburn, '50,
William Twitchell,
Darius C. Brown,
Benjamin C. Sargeant.**WARD 4.**Benjamin Goddard, '50,
Richard Dennis,
Holland Streeter,
Solomon D. Emerson.**WARD 5.**George P. Elliot, '50,
Edward Fifield,
John N. Ford,
Theodore H. Sweetser.**WARD 6.**George W. Worthen, '50,
George W. Jones, died Sept.,
Stephen P. Sargent, '50,
Albert Mallard, '50.WILLIAM LAMSON, JR., *Clerk*.

1852.**Mayor:**

ELISHA HUNTINGTON, †'37, †'38, †'39, †'40, †'41, †'44, †'45, *'47.

Aldermen:Joseph Bedlow, *'40, *'49, *'50,
Joseph M. Bullens,
Samuel Burbank, '40, '41,
Joseph B. V. Coburn,Wm. Fiske, '37, '38, '41, '50, *'51.
William North, '37, *'51,
Alpha Stevens,
Samuel J. Varney, '50, '51.THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**Rufus Rogers,
John C. Smith,
Jeremiah Clark,
Paul Hill.**WARD 2.**Paul Perkins,
Milton Bonney,
William Hovey,
Zachariah B. Caverly, '51.**WARD 3.**Darius C. Brown, '51,
William Twichell, '51,
Benjamin C. Sargeant, '51, *President*,
Michael B. Caswell.**WARD 4.**Holland Streeter, '51,
Elbridge Livingston,
Abram French,
Willard Minot.***WARD 5.**Edward Fifield, '51,
Phineas Whiting, '41,
George W. Patterson,
Jonathan Kendall, '42, '44.**WARD 6.**Leonard W. Jaquith,
Seth Pooler,
Caleb G. Weaver,
William C. Parker.WILLIAM LAMSON, JR., *Clerk.***1853.****Mayor:**

SEWALL G. MACK, '43, '44, *'47.

Aldermen:Elisha Huntington, †'37, †'38, †'39,
†'40, †'41, †'44, †'45, *'47, †'52,
Samuel K. Hutchinson,
Stephen Mansur, '36, '39, *'40, *'47,
Joseph B. V. Coburn, *'52,Ira Spalding, '42, '43,
Joseph M. Bullens, *'52,
Alpha Stevens, *'52,
Joseph White.THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**Rufus Rogers, '52,
John C. Smith, '52,
Marcus A. Thomas,
James Cook, '36.**WARD 2.**Paul Perkins, '52,
Milton Bonney, '52,
George G. Bumpus,
George W. Stanley.**WARD 3.**Michael B. Caswell, '52,
Calvin Philbrick,
Leonard Brown,
Henry H. Wilder.**WARD 4.**Abram French, '52,
Henry C. Howe,
Joseph S. Grush,
Samuel K. Pickering.**WARD 5.**George W. Patterson, '52,
Wm. A. Richardson, '49, *Presid't*,
Patrick Conlan,
Jonathan Bowers.**WARD 6.**Caleb G. Weaver, '52,
William C. Parker, '52,
George F. Woods,
C. F. Blanchard.WILLIAM LAMSON, JR., *Clerk.*

1854.**Mayor:**

SEWALL G. MACK, '43, '44, *'47, †'53.

Aldermen:

Elisha Huntington, †'37, †'38, †'39, †'40,
 †'41, †'44, †'45, *'47, †'52, *'53,
 J. B. V. Coburn, *'52, *'53, res'd Jan.,
 Samuel K. Hutchinson, *'53,
 Ira Spalding, '42, '43, *'53,

Joseph White, *'53,
 Horatio Fletcher, '47,
 C. F. Blanchard, '53,
 Charles Sperry.

WILLIAM LAMSON, JR., *City Clerk.***Common Council:****WARD 1.**

John C. Smith, '52, '53,
 Paul Hill, '52,
 Marcus A. Thomas, '53,
 Thomas Lennon.

WARD 2.

George W. Stanley, '53,
 William H. Gage,
 Amos A. Taylor,
 William H. Bradley.

WARD 3.

Calvin Philbrick, '53,
 Leonard Brown, '53, declined,
 Darius C. Brown, '51, '52, elected,
 Henry H. Wilder, '53,
 Peter O. C. Frawley.

WARD 4.

Henry C. Howe, '53,
 Joseph S. Grush, '53,
 Samuel K. Pickering, '53,
 Hubbard Wilson.

WARD 5.

William A. Richardson, '49, †'53.
President,
 Jonathan Bowers, '53,
 Patrick Conlan, '53,
 John C. Woodward.

WARD 6.

George F. Woods, '53,
 Charles S. Eastman,
 Levi H. Straw,
 William P. Webster.

LEONARD BROWN, *Clerk.***1855.****Mayor:**

AMBROSE LAWRENCE, '49, '51.

Aldermen:

Wm. Fiske, '37, '38, '41, '50, *'51, *'52,
 Artemas L. Brooks, *'49,
 Daniel Woodward,
 Lorenzo G. Howe,

Andrew T. Nute,
 Abner Frost,
 William S. Johnston,
 Shadrach R. Brackett.

WILLIAM LAMSON, JR., *City Clerk.***Common Council:****WARD 1.**

Maynard Bragg, '49, '50,
 Aaron B. Young,
 Augustus B. Roby,
 George L. Harris.

WARD 2.

William G. Morse,
 George K. Paul,
 Mark H. Cook,
 Joseph A. Patten.

WARD 3.

Alfred Gilman, '43, '48, '49, *President,*
 Daniel Hurd,
 Theodore Warren,
 Stephen K. Fielding.

WARD 4.

Joshua W. Daniels,
 John Bennett,
 Alanson Folsom,
 Francis H. Nourse.

WARD 5.

John C. Woodward, '54,
 Stephen Bartlett,
 Jonathan Johnson,
 Oliver P. Rand.

WARD 6.

Levi H. Straw, '54,
 William T. Whitten,
 Lucien P. Stacy,
 James M. Moore.

LEONARD BROWN, *Clerk.*

1856.**Mayor:**

ELISHA HUNTINGTON, †'37, †'38, †'39, †'40, †'41, †'44,
†'45, *'47, †'52, *'53, *'54.

Aldermen:

Edward Tuck,
Samuel Burbank, '40, '41, *'52,
Charles B. Coburn, '44,
William P. Webster, '54,
Hapgood Wright, '45, '46,

Charles H. Wilder, '37, '44, '45,
O. J. Conant, resigned in March,
James H. Rand,
Jonathan Johnson, elected in
June.

WILLIAM LAMSON, JR., *City Clerk.*

Common Council:**WARD 1.**

Enos O. Kingsley,
Abiel Pevey,
David M. Collins,
Marshall E. Thompson.

WARD 2.

Isaac Hinckley,
Seth Gage,
Peter Flanders, Jr.,
Leonard F. Jewell.

WARD 3.

David Rogers,
Benj. C. Sargeant, '51, †'52, *President*,
Henry H. Carroll,
Peter Powers.

WARD 4.

Francis H. Nourse, '55,
Alden B. Buttrick,
Holland Streeter, '51, '52,
James Sands.

WARD 5.

Frederick Holton,
Isaac Place,
Albert Wheeler,
Abiel Rolfe, '48, *'51.

WARD 6.

Eliphalet Hills,
Jonathan P. Folsom,
James K. Fellows, '37,
John K. Chase.

JAMES J. MAGUIRE, *Clerk.*

1857.**Mayor:**

STEPHEN MANSUR, '36, '39, *'40, *'47, *'53.

Aldermen:

Andrew T. Nute, *'55,
John C. Woodward, '54, '55,
Jonathan Smothers, '50, '51,
Samuel W. Stickney,

John B. Tuttle,
Francis H. Nourse, '55, '56,
Jonathan Johnson, '55, *'56,
John Nesmith, '39, '40, '42, '48.

WILLIAM LAMSON, JR., *City Clerk.*

Common Council:**WARD 1.**

Abiel Pevey,
Stephen T. Stanley,
Charles A. Welch,
George F. Scribner.

WARD 2.

William G. Morse, '55,
William D. Vinall,
Temple Tebbetts,
James M. Howe.

WARD 3.

Benjamin C. Sargeant, '51, †'52, †'56,
David Rogers, '56,
Henry H. Carroll, '56,
Nathan Allen.

WARD 4.

Caleb Crosby, '49, '50,
John F. Howe,
John C. Jepson,
Alanson Nichols.

WARD 5.

Frederick Holton, '56, *President*,
William H. Wiggin,
William Goodale,
Charles Hubbard.

WARD 6.

Erastus Boyden,
Jonathan Kimball,
Robert J. Garrett,
William Nichols.

HENRY A. LORD, *Clerk.*

1858.**Mayor:**

ELISHA HUNTINGTON, †'37, †'38, †'39, †'40, †'41, †'44,
†'45, *'47, †'52, *'53, *'54, †'56.

Aldermen:

Sewall G. Mack, '43, '44, *'47, †'53, †'54,
Samuel W. Stickney, *'57,
Abiel Pevey, '56, '57,
Jeremiah P. Jewett, '42,

Joseph M. Dodge, '37,
Harvey Silver,
Albert Wheeler, '56,
Edwin A. Alger.

JOHN H. MCALVIN, *City Clerk.*

Common Council:**WARD 1.**

Charles Wilkins,
John M. Maynard,
John E. Webb,
William Barnard.

WARD 2.

Edward Tuck, *'56,
William P. Webster, '54, *'56,
Andrew Blood,
William F. Salmon.

WARD 3.

Benjamin C. Sargeant, '51, †'52, †'56,
'57, *President*,
Hanover Dickey,
Joseph A. Brabrook,
Benjamin S. Butterworth.

WARD 4.

Enoch P. Young,
Zephaniah Goward,
Jesse Blake,
John F. Howe, '57.

WARD 5.

Willard Dudley,
Samuel T. Manahan,
Isaac Page,
John Avery, 2d.

WARD 6.

William Nichols, '57,
Alpha B. Farr, resigned in Jan.,
Leonard Brown, '53, '54, elec'd Feb.
Erastus Boyden, '57,
James H. Rand, *'56, resign'd May,
Eben'r Burgess, elected in June.

GEORGE GARDNER, *Clerk.*

1859.**Mayor:**

JAMES COOK, '36, '53.

Aldermen:

Lorenzo G. Howe, *'55,
Samuel J. Varney, '50, '51, *'52,
Paul Hill, '52, '54,
Ambrose Lawrence, '49, '51, †'55, re-
signed in April,
Darius C. Brown, '51, '52,

John F. Howe, '57, '58,
Joshua Converse, '40, *'51, re'd Apr.
J. P. Folsom, '56, resign'd in April,
Edward Tuck, *'56, '58, elect'd May,
Sam'l T. Manahan, '58, elec'd May,
Jonathan Ladd, elected in May.

JOHN H. MCALVIN, *City Clerk.*

Common Council:**WARD 1.**

John E. Webb, '58,
Charles Wilkins, '58,
William Barnard, '58,
William D. Blanchard.

WARD 2.

W. P. Webster, '54, *'56, '58, *President*,
William F. Salmon, '58,
James M. Howe, '57,
David Nichols.

WARD 3.

George Hobson,
Asahel D. Puffer,
John Willoughby,
Benjamin S. Butterworth, '58.

WARD 4.

Caleb Crosby, '49, '50, '57,
Jesse Blake, '58,
George W. Partridge,
George W. Young.

WARD 5.

Horatio G. F. Corliss, '44, '46,
Luther B. Morse,
Josiah G. Peabody, *'50,
William Goodale, '57.

WARD 6.

Charles A. Stott,
Levi Sprague,
Ebenezer Burgess, '58,
Leonard Brown, '53, '54, '58.

GEORGE GARDNER, *Clerk.*

1860.**Mayor:**

BENJAMIN C. SARGEANT, '51, †'52, †'56, '57, †'58.

Aldermen:

Edward F. Watson, '40, '41, *'44, *'45,
 Lorenzo G. Howe, *'55, *'59,
 James Watson, '50, '51,
 William G. Morse, '55, '57,

Henry H. Wilder, '53, '54,
 Abner Frost, *'55,
 Samuel T. Manahan, '58, *'59,
 William S. Gardner.

JOHN H. McALVIN, *City Clerk.***Common Council:****WARD 1.**

Benjamin S. Ireson,
 Enoch Quimby,
 John P. Slocum,
 Amos H. Foster.

WARD 2.

Henry P. Clough,
 Alfred S. Saunders, '49,
 Wm. F. Salmon, '58, '59, *President*,
 Joseph L. Sargent.

WARD 3.

George Hobson, '59,
 Josiah B. Fielding,
 Henry P. Perkins,
 Hocum Hosford.

WARD 4.

George W. Partridge, '59,
 George W. Young, '59,
 Morrill M. Bohonan,
 Caleb Crosby, '49, '50, '57, '59.

WARD 5.

Josiah G. Peabody, *'50, '59,
 Sullivan L. Ward,
 George F. Morey,
 William H. Lamson.

WARD 6.

William Nichols, '57, '58,
 Samuel T. Lancaster,
 Charles A. Stott, '59,
 Foster Nowell.

GEORGE GARDNER, *Clerk.***1861.****Mayor:**

BENJAMIN C. SARGEANT, '51, †'52, †'56, '57, †'58, †'60.

Aldermen:

Samuel T. Manahan, '58, *'59, *'60,
 Jonathan P. Folsom, '56, *'59,
 James Watson, '50, '51, *'60,
 William G. Morse, '55, '57, *'60,
 Hocum Hosford, '60,

Aldis L. Waite,
 David Whitney, declined acceptance,
 Sager Ashworth, elected in May,
 William S. Gardner, *'60.

JOHN H. McALVIN, *City Clerk.***Common Council:****WARD 1.**

Frank E. Jewett,
 M. Gilbert Perkins,
 Jacob Baron,
 William D. Blanchard, '59.

WARD 2.

Alfred S. Saunders, '49, '60,
 Joseph L. Sargent, '60,
 Henry P. Clough, '60,
 Henry S. Orange.

WARD 3.

William L. North, *President*,
 George W. Norris,
 Henry P. Perkins, '60,
 James G. Morrison.

WARD 4.

Joseph Cater,
 Joseph B. Keyes,
 Morrill M. Bohonan, '60,
 Abel M. Ayer.

WARD 5.

Sullivan L. Ward, '60,
 Samuel Beck,
 William H. Parker,
 George F. Morey, '60.

WARD 6.

Samuel T. Lancaster, '60,
 Foster Nowell, '60,
 Elon A. Sanborn,
 George E. Dana.

GEORGE GARDNER, *Clerk.*

1862.**Mayor:**

HOCUM HOSFORD, '60, * '61.

Aldermen:

Mertoun C. Bryant,
 Edwin A. Alger, * '58,
 James B. Francis, * '49, * '50,
 William A. Burke,

Isaac F. Scripture,
 Aldis L. Waite, * '61,
 Albert Wheeler, '56, * '58,
 Jona. P. Folsom, '56, * '59, * '61.

JOHN H. McALVIN, *City Clerk.***Common Council:****WARD 1.**

Amos D. Wright,
 Frank E. Jewett, '61,
 Horatio G. Burgess,
 Charles F. Hard.

WARD 2.

Benedict O. Carpenter,
 William T. McNeill,
 Lorenzo G. Howe, * '55, * '58, * '60,
 Henry S. Orange, '61.

WARD 3.

George W. Norris, '61,
 Edmund D. Fletcher,
 Everett W. French,
 John Quinn.

WARD 4.

Joseph B. Keyes, '61,
 George Runels,
 John Pettingell,
 Hubbard Willson, '54.

WARD 5.

Rollin C. Downs,
 Albert Mallard, '50, '51,
 Edward Fifield, '51, '52,
 Cleveland J. Cheney.

WARD 6.

Geo. F. Richardson, *President*,
 Albion J. Dudley,
 Elon A. Sanborn, '61,
 Frederick Frye.

GEORGE GARDNER, *Clerk.***1863.****Mayor:**

HOCUM HOSFORD, '60, * '61, † '62.

Aldermen:

James B. Francis, * '49, * '50, * '62,
 Edwin A. Alger, * '58, * '62,
 Abiel Pevey, '56, '57, * '58,
 William A. Burke, * '62,

Isaac F. Scripture, * '62,
 Otis Allen, '43, '48,
 Albert Wheeler, '56, * '58, * '62,
 William Nichols, '57, '58, '60.

JOHN H. McALVIN, *City Clerk.***Common Council:****WARD 1.**

Charles F. Hard, '62,
 Amos D. Wright, '62,
 John Cosgrove,
 William A. Wright.

WARD 2.

George F. Sawtell,
 Henry S. Orange, '61, '62,
 Hugh McEvoy,
 Nathaniel Stearns.

WARD 3.

Everett W. French, '62,
 Fordyce Coburn, '50, '51,
 Edmund D. Fletcher, '62,
 John Quinn, '62.

WARD 4.

Atwell F. Wright,
 Josiah Gates,
 William Stafford,
 John McCann.

WARD 5.

James C. Ayer,
 Charles W. Saunders,
 Cyrus H. Latham,
 John E. Downs.

WARD 6.

Geo. F. Richardson, ‡ '62, *Pres.*,
 Albion J. Dudley, '62,
 Benedict O. Carpenter, '62,
 Frederick Frye, '62.

GEORGE GARDNER, *Clerk.*

1864.**Mayor:**

HOCUM HOSFORD, '60, *'61, †'62, †'63.

Aldermen:

William S. Southworth,
James B. Francis, *'49, *'50, *'62, *'63,
Dana B. Gove,
William T. McNeill, '62,

George W. Norris, '61, '62,
George Runels, '62,
Cyrus H. Latham, '63,
George F. Richardson, †'62, †'63.

JOHN H. McALVIN, *City Clerk.***Common Council:****WARD 1.**

Alden B. Watson,
Lewis L. Perrin,
Frederick S. Tukey,
John Cosgrove, '63.

WARD 2.

George Ripley, *President*,
Andrew F. Jewett,
Artemas S. Young,
Hoyt W. Hilton.

WARD 3.

Samuel N. Wood,
Charles W. Dodge,
Joseph S. Pollard,
James G. Morrison, '61.

WARD 4.

Atwell F. Wright, '63,
Daniel Churchill,
William W. Sherman,
Francis Jewett.

WARD 5.

John E. Downs, '63,
Thos. G. Gerrish, res'd June 14,
Charles Hubbard, '57,
Cleveland J. Cheney, '62.

WARD 6.

Levi Sprague, '59,
Tobias L. P. Lamson,
Addison Putnam,
Albion J. Dudley, '62, '63.

GEORGE GARDNER, *Clerk.***1865.****Mayor:**

JOSIAH G. PEABODY, *'50, '59, '60.

Aldermen:

Ew'd F. Watson, '40, '41, *'44, *'45, *'60,
George W. Norris, '61, '62, *'64,
Dana B. Gove, *'64,
William T. McNeill, '62, *'64,

Henry H. Wilder, '53, '54, *'60,
Josiah Gates, '63,
Cyrus H. Latham, '63, *'64,
William Brown, '45, '46.

JOHN H. McALVIN, *City Clerk.***Common Council:****WARD 1.**

Alden B. Watson, '64,
Lewis L. Perrin, '64,
George N. Osgood,
John R. Southwick, '47.

WARD 2.

George Ripley, †'64, *President*,
Andrew F. Jewett, '64,
Julian V. Keyes,
Chester W. Rugg.

WARD 3.

Joseph S. Pollard, '64,
Charles W. Dodge, '64,
Edward C. Rice,
Frederick T. North.

WARD 4.

Francis Jewett, '64,
Benjamin Walker,
Benjamin L. Googins,
John Pearson.

WARD 5.

Charles Hubbard, '57, '64,
James Kent,
Simeon D. Osterhoudt,
James Foster.

WARD 6.

Tobias L. P. Lamson, '64,
Luke C. Dodge,
Gustavus A. Gerry,
James M. Moore, '55.

GEORGE GARDNER, *Clerk.*

1866.**Mayor:****JOSIAH G. PEABODY**, *'50, '59, '60, †'65.**Aldermen:**

Samuel A. Brown,
 Albert B. Plimpton,
 John R. Southwick, '47, '65,
 Joseph L. Sargent, '60, '61,

Charles W. Dodge, '64, '65,
 Josiah Gates, '63, *'65,
 Henry M. Hooke,
 Albion J. Dudley, '62, '63, '64.

JOHN H. McALVIN, *City Clerk*.**Common Council:****WARD 1.**

William A. Hodge,
 William A. Wright, '63,
 Jacob Baron, '61,
 Rollin C. Downs, '62.

WARD 2.

Andrew F. Jewett, '64, '65,
 George H. Whitmore,
 Julian V. Keyes, '65,
 Chester W. Rugg, '65.

WARD 3.

Edward C. Rice, '65,
 Frederick T. North, '65,
 James N. Pinkham,
 Oliver W. Smith.

WARD 4.

Benjamin L. Googins, '65,
 Alfred Scott,
 Thomas F. Burgess,
 Benjamin Walker, '65.

WARD 5.

Robert H. Butcher,
 John T. Lee,
 George L. Huntoon,
 Jonathan Johnson, '55, *'56, *'57.

WARD 6.

Gustavus A. Gerry, '65, *President*,
 Luke C. Dodge, '65,
 Charles A. Kimball,
 Alfred H. Chase.

GEORGE GARDNER, *Clerk*.**1867.****Mayor:****GEORGE F. RICHARDSON**, †'62, †'63, *'64.**Aldermen:**

Charles B. Coburn, '44, '51, *'56,
 Hocum Hosford, 60, *'61, †'62, †'63, †'64,
 John R. Southwick, '47, '65, *'66,
 Joseph L. Sargent, 60, '61, *'66,
 Edward C. Rice, '65, '66,

Abner W. Buttrick, '40, '44, '45, '50;
 died June 29, '67.
 Wm. E. Livingston, el. Sept. 9, '67.
 Wm. H. Parker, '61,
 Albion J. Dudley, '62, '63, '64, *'66.

JOHN H. McALVIN, *City Clerk*.**Common Council:****WARD 1.**

John Shepard,
 Calvin Sawtell,
 Foster Wilson,
 M. Gilbert Perkins, '61.

WARD 2.

Gustavus A. Gerry, '65, †'66, *President*,
 Ruel J. Walker,
 William Dobbins,
 Silas Tyler, Jr.

WARD 3.

Jona. P. Folsom, '56, *'59, *'61, *'62,
 Frederick T. North, '65, '66,
 Samuel D. Prescott,
 Nathan M. Wright.

WARD 4.

John B. Hunt,
 John Q. A. Hubbard,
 Alfred Scott, '66,
 Thomas F. Burgess, '66.

WARD 5.

George L. Huntoon, '66,
 George S. Cheney,
 James Fobbs, '65,
 John T. Lee, '66.

WARD 6.

Alfred H. Chase, '66,
 James Lawton,
 John N. Peirce, Jr.,
 Foster Nowell, '60, '61, resigned
 May 14, '67.
 Wm. Kittredge, elected Sept. 9, '67

GEORGE GARDNER, *Clerk*.

1868.**Mayor:**

GEORGE F. RICHARDSON, †'62, †'63, *'64, †'67.

Aldermen:

Charles B. Coburn, '44, '51, *'56, *'67.
Francis Jewett, '64, '65,
John M. Pevey, resigned in July.
Charles L. Hildreth, elected in Sept.
Silas Tyler, Jr., '67.

Edward C. Rice, '65, '66, *'67,
William E. Livingston, *'67,
Frederic Frye, '62, '63,
Albion J. Dudley, '62, '63, '64, *'66.
*'67.

JOHN H. McALVIN, *City Clerk.*

Common Council:**WARD 1.**

Calvin Sawtell, '67,
John Shepard, '67,
John F. Merrill,
Frederic T. Greenhalge.

WARD 2.

Francis D. Munn,
Joseph A. Patten, '55,
Ruel J. Walker, '67,
Henry S. Orange, '61, '62, '63.

WARD 3.

George W. Badger,
Samuel D. Prescott, '67,
William Walker,
Albert A. Haggett.

WARD 4.

William H. Anderson,
John Q. A. Hubbard, '67,
Charles T. Crane,
John B. Hunt, '67.

WARD 5.

Edwin Lamson,
George S. Cheney, '67.
William Kelley,
Ethan N. Spencer.

WARD 6.

John N. Peirce, Jr., '67,
James Lawton, '67,
Francis Brown,
Alfred H. Chase, '66, '67, *President.*

GEORGE GARDNER, *Clerk.*

1869.**Mayor:**

JONATHAN P. FOLSOM, '56, *'59, *'61, *'62, '67.

Aldermen:

Francis Jewett, '64, '65, *'68,
Henry H. Wilder, '53, '54, *'60, *'65,
Charles L. Hildreth, *'68,
Cyrus H. Latham, '63, *'64, *'65.

Hapgood Wright, '45, '46, *'56,
John Q. A. Hubbard, '67, '68,
George S. Cheney, '67, '68,
Charles A. Stott, '59, '60.

JOHN H. McALVIN, *City Clerk.* Resigned March 15, 1869.

SAMUEL A. McPHETRES, *City Clerk.* Elected March 15, 1869.

Common Council:**WARD 1.**

Frederic T. Greenhalge, '68,
John H. Durgin, Jr.,
Patrick Keyes,
Benjamin Patch.

WARD 2.

Joseph A. Patten, '55, '68,
Phineas Jones,
Francis D. Munn, '68,
Amos Sanborn.

WARD 3.

George W. Badger, '68,
Albert A. Haggett, '68,
William Walker, '68,
George E. Pinkham.

WARD 4.

William H. Anderson, '68, *Pres.*,
Simeon G. Lyford,
Henry P. Carter,
Epaphras A. Hill.

WARD 5.

William Kelley, '68,
Willard A. Brown,
William O. Fiske,
Edwin Lamson, '68.

WARD 6.

Francis Brown, '68,
Alpha B. Farr, '58,
Lucian P. Stacy, '55,
William Kittredge, '67.

GEORGE GARDNER, *Clerk.*

1870.**Mayor:**

JONATHAN P. FOLSOM, '56, *'59, *'61, *'62, '67, †'69.

Aldermen:

Edward F. Sherman,
Frank F. Battles,
Charles L. Hildreth, *'68, *'69.
Amos B. French,

Hapgood Wright, '45, '46, *'56, *'69
John Q. A. Hubbard, '67, '68, *'69.
Addison Putnam, '64.
Charles A. Stott, '59, '60, *'69.

SAMUEL A. MCPHETRES, *City Clerk.*

Common Council:**WARD 1.**

John H. Durgin, Jr., '69.
Benjamin Patch, '69.
Patrick Keyes, '69.
Samuel G. Ladd.

WARD 2.

Phineas Jones, '69.
John L. Moulton,
Patrick Cummiskey,
David G. Skillings,

WARD 3.

Albert A. Haggett, '68, '69, *President.*
Henry P. Perkins, '60, '61.
Hocum Hosford, '60, *'61, †'62, †'63,
†'64, *'67, declined.
Matthew Donovan,
John L. Meadowcroft, elected Jan. 24.

WARD 4.

Epaphras A. Hill, '69.
Henry P. Carter, '69.
Simeon G. Lyford, '69.
Michael Corbett.

WARD 5.

William O. Fiske, '69.
Willard A. Brown, '69.
James D. Hartwell,
Jeremiah Crowley.

WARD 6.

Alpha B. Farr, '58, '69.
William Kittredge, '67, '69.
Lucian P. Stacy, '55, '69.
John Stott.

GEORGE GARDNER, *Clerk.*

1871.**Mayor:**

EDWARD F. SHERMAN, *'70.

Aldermen:

Frank F. Battles, *'70,
William F. Salmon, '58, '59, †'60,
John W. Smith, '49, '50,
Amos B. French, *'70,

Albert A. Haggett, '68, '69, †'70,
Henry C. Howe, '53, '54,
Frederick Ayer,
Addison Putnam, '64, *'70.

SAMUEL A. MCPHETRES, *City Clerk.*

Common Council:**WARD 1.**

John H. Durgin, Jr., '69, '70,
Samuel G. Ladd, '70,
Francis N. J. Haviland,
Joel Knapp.

WARD 2.

William Dobbins, '67,
John L. Moulton, '70,
Patrick Cummiskey, '70,
Amos A. Blanchard.

WARD 3.

Henry P. Perkins, '60, '61, '70, *Pres.*
John L. Meadowcroft, '70,
Horace Ela,
Julius C. Jockow.

WARD 4.

Benj. Walker, '65, '66,
Michael Corbett, '70,
Francis H. Chandler,
Charles T. Goddard.

WARD 5.

Jeremiah Crowley, '70,
Crawford Burnham,
Henry C. Church,
Patrick Lynch.

WARD 6.

Leonard Brown, '53, '54, '58, '59,
John Stott, '70,
Abel T. Atherton,
Nathaniel C. Sanborn.

GEORGE GARDNER, *Clerk.*

1872.**Mayor:**

JOSIAH G. PEABODY, *'50, '59, '60, †'65, †'66.

Aldermen:

Henry C. Howe, '53, '54, *'71,	Frederick T. North, '65, '66, '67,
Alexander G. Cumnock,	Benj. Walker, '65, '66, '71,
Benjamin Patch, '69, '70,	William Kelley, '68, '69,
Gustavus A. Gerry, '65, †'66, †'67,	Alpha B. Farr, '58, '69, '70.

SAMUEL A. MCPHETRES, *City Clerk.*

Common Council:**WARD 1.**

John E. Webb, '58, '59,
Alonzo F. Caswell,
Southwell Farrington,
True P. Jordan.

WARD 2.

Leonard Brown, '53, '54, '58, '59, '71,
Amos A. Blanchard, '71,
Joseph S. Brown,
Earl A. Thissell.

WARD 3.

Henry P. Perkins, '60, '61, '70, †'71,
Horace Ela, '71, [Pres.
Julius C. Jockow, '71,
Charles F. Tilton.

WARD 4.

Nathaniel P. Favor,
Nathan W. Frye,
Henry A. Lord,
Alonzo L. Russell.

WARD 5.

Crawford Burnham, '71,
Charles F. Belden,
Luther J. Eames,
William Shepard.

WARD 6.

Abel T. Atherton, '71,
Nathaniel C. Sanborn, '71,
Samuel M. Chase,
Julian Talbot.

GEORGE GARDNER, *Clerk.*

1873.**Mayor:**

FRANCIS JEWETT, '64, '65, *'68, *'69.

Aldermen:

Jonathan P. Folsom, '56, *'59, *'61, *'62, '67, †'69, †'70,	Charles A. F. Swan, elected Jan. 14,
George Runels, '62, *'64,	Jacob H. Sawyer,
Edward Tuck, *'56, '58, *'59, declin'd,	Jeremiah Crowley, '70, '71,
Isaac Farrington, '46, '47, declined,	Alpha B. Farr, '58, '69, '70, *'72,
William Dobbins, '67, '71, elec. Jan. 14,	George Stevens.

SAMUEL A. MCPHETRES, *City Clerk.*

Common Council:**WARD 1.**

John E. Webb, '58, '59, '72,
Alonzo F. Caswell, '72,
Frank Brady,
Stephen J. Smiley,

WARD 2.

Joseph S. Brown, '72,
Earl A. Thissell, '72,
Daniel Stickney,
Edward P. Woods.

WARD 3.

Albert A. Haggett, '68, '69, †'70, *'71,
Charles F. Tilton, '72, resig'd Mar. 1,
William Bass,
James Owens,
James A. Loughlin, elected April 8.

[Pres.

WARD 4.

Atwell F. Wright, '63, '64,
Nathaniel P. Favor, '72,
Nathan W. Frye, '72,
Henry A. Lord, '72.

WARD 5.

Robert H. Butcher, '66,
Charles F. Belden, '72,
Jared P. Maxfield,
George Smith.

WARD 6.

Nathaniel C. Sanborn, '71, '72,
Samuel M. Chase, '72,
George W. S. Hurd,
Artemas S. Tyler.

GEORGE GARDNER, *Clerk.*

1874.**Mayor:**

FRANCIS JEWETT, '64, '65, *'68, *'69, †'73.

Aldermen:

Jeremiah Crowley, '70, '71, *'73,
 Benj. Walker, '65, '66, '71, *'72.
 Alonzo F. Caswell, '72, '73,
 Joseph S. Brown, '72, '73,

Jonathan Kendall, '42, '44, '52,
 George L. Huntoon, '66, '67,
 Nathaniel C. Sanborn, '71, '72, '73,
 George Stevens, *'73.

SAMUEL A. McPHETRES, *City Clerk.***Common Council:****WARD 1.**

Charles A. Welch, '57,
 Frank Brady, '73,
 Stephen J. Smiley, '73,
 Charles H. Harvey.

WARD 2.

Daniel Stickney, '73,
 Edward P. Woods, '73,
 Charles J. Eastman,
 Edward E. Reed.

WARD 3.

Julius C. Jockow, '71, '72,
 James Owens, '73,
 James A. Loughlin, '73,
 George W. Tilton.

WARD 4.

Charles T. Goddard, '71,
 Nathan W. Frye, '72, '73, *President*,
 Jacob H. Sawyer, *'73,
 Julian A. Richardson.

WARD 5.

Jared P. Maxfield, '73,
 John B. Lyford,
 Samuel P. Marin,
 John Scott.

WARD 6.

George W. S. Hurd, '73,
 Joel A. Abbott,
 Thomas Carolin,
 Jason Fuller.

GEORGE GARDNER, *Clerk*, died May 29.DAVID CHASE, *Clerk*, elected June 4.**1875.****Mayor:**

FRANCIS JEWETT, '64, '65, *'68, *'69, †'73, †'74.

Aldermen:

Benj. Walker, '65, '66, '71, *'72, *'74,
 Jacob Rogers,
 John A. Goodwin,
 Joseph S. Brown, '72, '73, *'74,

Hapgood Wright, '45, '46, *'56, *'69,
 James Owens, '73, '74,
 Alden B. Richardson,
 Samuel A. Chase.

SAMUEL A. McPHETRES, *City Clerk.***Common Council:****WARD 1.**

Charles A. Welch, '57, '74,
 Charles H. Harvey, '74,
 John F. Howard,
 John W. Welch.

WARD 2.

Earl A. Thissell, '72, '73,
 Edward E. Reed, '74,
 William A. Read,
 Leavitt R. J. Varnum.

WARD 3.

Albert A. Haggett, '68, '69, †'70, *'71.
 George W. Tilton, '74, [†'73, *Pres.*
 Charles Cowley.
 Thomas R. Garity.

WARD 4.

Josiah Butler,
 Francis Carll,
 Edward P. Dennis,
 Edward Stockman.

WARD 5.

James D. Hartwell, '70,
 John B. Lyford, '74,
 Orford R. Blood,
 Charles W. Sleeper.

WARD 6.

Joel A. Abbott, '74,
 Thomas Carolin, '74,
 Jason Fuller, '74,
 Albert D. Wright.

DAVID CHASE, *Clerk.*

1876.**Mayor:**

CHARLES A. STOTT, '59, '60, *'69, *'70.

Aldermen:

Jacob Rogers, *'75,	Henry A. Hildreth,
John A. Goodwin, *'75, [†'73, †'75,	George E. Stanley,
Albert A. Haggett, '68, '69, †'70, *'71,	Francis Carll, '75,
Charles F. Belden, '72, '73,	William H. Wiggin, '57.

SAMUEL A. McPHETRES, *City Clerk.***Common Council:****WARD 1.**

John W. Welch, '75,
 Lewis Stiles.
 Daniel W. Manning,
 David M. Collins, '56, declined,
 John F. Howard, '75, elected Jan. 11.

WARD 2.

Leavitt R. J. Varnum, '75,
 Charles E. Hallowell,
 Charles Callahan,
 William A. Read, '75.

WARD 3.

Charles Cowley, '75,
 Charles H. Kimball,
 Charles Runels,
 James Howard, died after election,
 William H. Grady, elected Jan. 11.

WARD 4.

Edward Stockman, '75, res. May 23,
 Gardner W. King,
 Stephen H. Jones,
 Charles D. Starbird,
 James W. Bennett, elected June 22.

WARD 5.

Orford R. Blood, '75,
 John F. Kimball, *Pres. from* May 23.
 Charles H. Hanson,
 M. Gilbert Perkins, '61, '67.

WARD 6.

Edwin Sanborn,
 Benjamin C. Dean, *Pres.*, res. May 23,
 Charles H. Walker,
 John J. Pickman,
 Willis Farrington, elected June 22.

DAVID CHASE, *Clerk.***1877.****Mayor:**

CHARLES A. STOTT, '59, '60, *'69, *'70, †'76.

Aldermen:

Jeremiah Crowley, '70, '71, *'73, *'74,	Orford R. Blood, '75, '76, seat vacated,
Horace R. Barker,	Stephen B. Puffer, dec. el. Jan. 2,
George E. Stanley, *'76,	Robert Park,
Charles H. Kimball, '76,	George E. Pinkham, '69.
George P. Walker,	

SAMUEL A. McPHETRES, *City Clerk.***Common Council:****WARD 1.**

Daniel W. Manning, '76,
 Lewis Stiles, '76,
 John Courtney,
 Frank Brady, '73, '74, res. March 27,
 Jared P. Maxfield, '73, '74, elec. May 8.

WARD 2.

Charles E. Hallowell, '76,
 Francis D. Munn, '68, '69,
 Charles H. Robbins,
 Oliver M. Harding.

WARD 3.

William H. Grady, '76,
 Patrick Lynch,
 Simon Kelly,
 George E. Davis.

WARD 4.

Gardner W. King, '76,
 James W. Bennett, '76,
 Irving K. Goodale,
 Orlando Blodgett.

WARD 5.

John F. Kimball, †'76,
 Charles H. Hanson, '76,
 Peter S. Coburn,
 Robert Goulding.

WARD 6.

Edwin Sanborn, '76,
 John J. Pickman, '76,
 Charles H. Walker, '76,
 Augustus E. Spaulding, d. Jan. 10,
 George S. Cushing, elected Feb. 6.

DAVID CHASE, *Clerk.*

1878.

Mayor:

JOHN A. G. RICHARDSON.

Aldermen:

Stephen B. Puffer, * '77,	George E. Scripture,
Robert Park, * '77,	Joseph S. Pollard, '64, '65, [* '77,
Horace R. Barker, * '77,	Jeremiah Crowley, '70, '71, * '73, * '74,
George F. Scribner, '57,	Nathaniel C. Sanborn, '71, '72, '73, * '74.

SAMUEL A. MCPHETRES, *City Clerk.*

Common Council:

<p style="text-align: center;">WARD 1.</p> <p>John Courtney, '77, John J. Mealey, Joseph M. Ambrose, Charles H. Harvey, '74, '75.</p> <p style="text-align: center;">WARD 2.</p> <p>Oramel A. Brigham, Edward M. Tucke, William W. Clark, Albert W. Monty.</p> <p style="text-align: center;">WARD 3.</p> <p>Simon Kelly, '77, Edward Cawley, Henry P. Morris, Samuel D. Butterworth.</p>	<p style="text-align: center;">WARD 4.</p> <p>Irving K. Goodale, '77, Orlando Blodgett, '77, Robert G. Bartlett, Stephen H. Jones, '76.</p> <p style="text-align: center;">WARD 5.</p> <p>Robert Goulding, '77, Peter S. Coburn, '77, John F. Kimball, ‡ '76, ‡ '77, <i>Pres.</i>, Enos O. Kingsley, '56.</p> <p style="text-align: center;">WARD 6.</p> <p>George S. Cushing, '77, Eli W. Hoyt, Luke B. Taylor, Miles F. Brennan, to Jan. 22, Thomas Nesmith, from Jan. 22.</p>
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DAVID CHASE, *Clerk.*

1879.

Mayor:

JOHN A. G. RICHARDSON, † '78.

Aldermen:

Horace R. Barker, * '77, * '78,	George E. Scripture, * '78.
Charles A. R. Dimon,	George F. Scribner, '57, * '78,
Joseph S. Pollard, '64, '65, * '78,	Charles F. Howe,
Charles S. Lilley,	Robert Goulding, '77, '78.

SAMUEL A. MCPHETRES, *City Clerk.*

Common Council:

<p style="text-align: center;">WARD 1.</p> <p>Joseph M. Ambrose, '78, John O'Donnell, James Kelly, Richard J. Noonan.</p> <p style="text-align: center;">WARD 2.</p> <p>Albert W. Monty, '78. Charles H. Richardson, William K. Chase, res. Nov. 25. Edwin A. Robinson, Edward M. Tucke, '78. elect. Dec. 9.</p> <p style="text-align: center;">WARD 3.</p> <p>Edward Cawley, '78, Henry P. Morris, '78, William T. Benson, Patrick A. Rogers.</p>	<p style="text-align: center;">WARD 4.</p> <p>Robert G. Bartlett, '78, Fred Woodies, Charles F. Varnum, Charles E. Farrington.</p> <p style="text-align: center;">WARD 5.</p> <p>Albert W. Burnham, Ambrose L. Ready, Joseph M. Wilson, Edward B. Peirce, <i>Pres.</i></p> <p style="text-align: center;">WARD 6.</p> <p>Eli W. Hoyt, '78, Luke B. Taylor, '78, Major A. Shaw, Miles F. Brennan, '78.</p>
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DAVID CHASE, *Clerk.*

1880.**Mayor:****FREDERIC T. GREENHALGE.** '68, '69.**Aldermen:**

James D. Hartwell, '70, '75.
 Atwill F. Wright, '63, '64,
 Charles H. Richardson,
 Edwin Lamson, '68, '69,

Isaac F. Scripture, * '62, * '63
 Robert Wood,
 Charles H. Coburn,
 James C. Abbott.

SAMUEL A. McPHETRES, *City Clerk.***Common Council:****WARD 1.**

James Kelly, '79,
 Richard J. Noonan, '79,
 Thomas J. Flynn.
 Lawrence Cummings.

WARD 2.

Edwin A. Robinson, '79,
 Wilbur L. Bates,
 Samuel W. Foster,
 Earl A. Thissell, '72, '73, '75, *Pres't.*

WARD 3.

Peter H. Donohoe,
 William T. Benson, '79,
 Patrick A. Rogers, '79,
 Frank Wood.

WARD 4.

Fred Woodies, '79,
 Charles F. Varnum, '79,
 Charles E. Farrington, '79,
 Charles D. Starbird, '76

WARD 5.

Joseph M. Wilson, '79.
 Ambrose L. Ready, '79.
 Samuel Hosmer,
 Edward B. Peirce, ‡ '79

WARD 6.

Benjamin F. Freeman,
 J. Tyler Stevens,
 Charles C. Hutchinson.
 Henry C. Cooper.

DAVID CHASE, *Clerk.***1881.****Mayor:****FREDERIC T. GREENHALGE,** '68, '69, † '80.**Aldermen:**

Charles H. Richardson, * '80,
 Isaac F. Scripture, * '62, * '63, * '80,
 Robert Wood, * '80,
 Ambrose L. Ready, '79, '80,

Levi Sprague, '59, '64,
 Julius A. Stiles,
 Samuel D. Butterworth, '78,
 Thomas R. Garity, '75.

SAMUEL A. McPHETRES, *City Clerk.***Common Council:****WARD 1.**

Thomas J. Flynn, '80,
 Lawrence Cummings, '80,
 Robert J. Thomas,
 Jeremiah J. Hayes.

WARD 2.

Zachariah D. Hall,
 James M. Howe, '57, '59,
 Hubert M. Potter,
 Moses Gibson.

WARD 3.

Frank Wood, '80,
 Peter H. Donohoe, '80,
 John E. Maguire,
 D. Moody Prescott.

WARD 4.

Julius C. Johnson,
 Stephen C. Davis,
 Edward Garner,
 William N. Osgood.

WARD 5.

Atkinson C. Varnum,
 Samuel Hosmer, '80,
 Samuel P. Marin, '74,
 Albert W. Burnham, '79.

WARD 6.

Charles C. Hutchinson, '80.
 Albert G. Thompson,
 Thomas Nesmith, '78,
 Lawrence J. Smith.

DAVID CHASE, *Clerk.*

1882.**Mayor:****GEORGE RUNELS, '62, *'64.****Aldermen:**

Thomas R. Garity, '75, *'81, *Chair'm.*
 * Charles W. Sleeper,
 George B. Smith,
 William A. Wright, '63, '66,
 David Whitaker,

D. Moody Prescott, '81,
 George S. Cushing, '77, '78,
 John F. Phillips,
 † John Welch.

‡ SAMUEL A. MCPHETRES, *City Clerk.*

§ DAVID W. O'BRIEN, " "

* Resigned, May 23; special election to fill vacancy, June 20.

† Elected June 20, to fill vacancy. ‡ Died Sept. 29, 1882.

§ Elected Oct. 4, 1882.

Common Council:**WARD 1.**

Robert J. Thomas, '81,
 Jeremiah J. Hayes, '81,
 Dennis J. Crowley,
 John A. Walsh.

WARD 2.

Zachariah D. Hall, '81,
 James M. Howe, '57, '59, '81,
 Moses Gibson, '81,
 James F. Puffer, Jr.

WARD 3.

Frank Wood, '80, '81,
 John E. Maguire, '81,
 John J. Mead,
 James Grady.

WARD 4.

Julius C. Johnson, '81,
 Stephen C. Davis, '81.
 Edward Garner,
 William N. Osgood, *'81.

WARD 5.

Atkinson C. Varnum, '81,
 Albert W. Burnham, '79, '81,
 Artemas B. Woodworth,
 Horace B. Barnes.

WARD 6.

Albert G. Thompson, '81,
 Lawrence J. Smith, '81,
 Thaddeus S. Cobb,
 Miles J. Fletcher.

DAVID CHASE, *Clerk.*

* President Council, 1882.

1883.**Mayor:****JOHN J. DONOVAN.****Aldermen:**

John F. Phillips, *'82, *Chairman.*
 George B. Smith, *'82,
 Robert J. Thomas, '81, '82,
 David Whitaker, *'82.

D. Moody Prescott, '81, *'82.
 Geo. W. Fifield,
 John Welch, *'82,
 Miles J. Fletcher, '82.

DAVID W. O'BRIEN, *City Clerk.***Common Council:****WARD 1.**

Dennis J. Crowley, '82.
 John J. Hogan,
 James H. Cahill,
 Daniel Murphy.

WARD 2.

Samuel Lawrence, '50,
 Joseph S. Brown, '72, '73, *'74, *'75.
 Albert W. Monty, '78, '79,
 John F. Thissel.

WARD 3.

James Grady, '82.
 John J. Mead, '82,
 Patrick J. Smith,
 Frank J. Donohue.

WARD 4.

James G. Elliott,
 Solomon K. Dexter,
 Alonzo L. Russell, '72,
 Geo. A. Bennett.

WARD 5.

Edward B. Peirce. ‡ '79, '80,
 Artemas B. Woodworth, '82,
 John P. Mahoney,
 Geo. L. Ashworth.

WARD 6.

Lawrence J. Smith, '81, '82,
 Thaddeus S. Cobb, '82, .
 J. Frank Page,
 Michael F. Clark.

DAVID CHASE, *Clerk.*

1884.**Mayor:**

JOHN J. DONOVAN, †'83.

Aldermen:

Robert J. Thomas, '81, '82, *'83, *Ch'n.*
 Miles J. Fletcher, '82, *'83,
 George W. Fifield, '83,
 Thaddeus S. Cobb, '82, '83,
 Edward B. Quinn,

Jeremiah Crowley, '70, '71, *'73,
 *'74, *'77, *'78,
 Peter H. Donohoe, '80, '81,
 Freeman B. Shedd.

DAVID W. O'BRIEN, *City Clerk.***Common Council:****WARD 1.**

John J. Hogan, '83, *President.*
 James H. Cahill, '83,
 Daniel Murphy, '83,
 James H. Morrison.

WARD 2.

Joseph S. Brown, '72, '73, *'74, *'75, '83,
 Albert W. Monty, '78, '79, '83,
 Earl A. Thissell, '72, '73, '75, †'80,
 John R. Pike.

WARD 3.

Patrick J. Smith, '83,
 Peter J. Brady,
 Thomas J. Sparks,
 John Nolan.

WARD 4.

James G. Elliott, '83,
 Solomon K. Dexter, '83,
 Alonzo L. Russell, '72, '83,
 George A. Bennett, '83.

WARD 5.

Edward B. Peirce, †'79, '80, †'83,
 George L. Ashworth,
 Joseph M. Wilson, '79, '80.
 James S. Hanson.

WARD 6.

J. Frank Page, '83,
 Michael F. Clark, '83,
 Alfred M. Chadwick,
 Marcellus H. Fletcher.

DAVID CHASE, *Clerk.***1885.****Mayor:**

EDWARD J. NOYES.

Aldermen:

John F. Phillips, *'82, *'83, *Chairman,*
 John F. Howe, '57, '58, *'59,
 William D. Brown,
 George E. Stanley, *'76, *'77,

James D. Hartwell, '70, '75, *'80,
 George F. Penniman,
 Oliver E. Cushing,
 James Francis.

SAMUEL M. CHASE, *City Clerk.***Common Council:****WARD 1.**

Patrick H. Plunkett,
 James H. Morrison, '84,
 Thomas J. Enright,
 Henry F. Keyes.

WARD 2.

George W. Brothers,
 Walter M. Sawyer,
 James R. Fulton,
 Francis D. Munn, Jr.

WARD 3.

Peter J. Brady, '84,
 Patrick J. Smith, '83, '84,
 John Nolan, '84,
 Thomas J. Sparks, '84.

WARD 4.

Arnold S. Welch,
 George A. Roper,
 William A. Lang,
 Frank W. Howe.

WARD 5.

Wilson W. Carey,
 James S. Hanson, '84,
 Henry L. Newhall,
 Elwyn W. Lovejoy.

WARD 6.

Alfred M. Chadwick, '84, *Pres't,*
 George R. Richardson,
 Luke B. Taylor, '78, '79,
 William H. White.

DAVID CHASE, *Clerk.*

1886.**Mayor:****JAMES C. ABBOTT.****Aldermen:**

Jeremiah Crowley, '70, '71, *'73, *'74,
 *'77, *'78, *'84, *Chairman*,
 John F. Phillips, *'82, *'83, *'85,
 Stephen B. Puffer, *'77, *'78,
 George E. Stanley, *'76, *'77, *'85,

Daniel Wright,
 Samuel D. Butterworth, *'78, *'81.
 George F. Penniman, *'85,
 James Francis, *'85.

SAMUEL CHASE, *City Clerk*.**Common Council:****WARD 1.**

Peter B. Sherlock,
 Patrick H. Plunkett, '85,
 Thomas J. Enright,
 Timothy H. Brennan.

WARD 2.

Walter M. Sawyer, '85, *President*,
 Charles H. Richardson, '79,
 James R. Fulton, '85,
 Francis D. Munn, Jr., '85.

WARD 3.

Daniel Cleary, '85,
 Patrick J. Mahan,
 Edward D. McVey,
 Thomas J. Sparks, '84, '85.

WARD 4.

Arnold S. Welch, '85,
 George A. Roper, '85,
 Frank W. Howe, '85,
 William A. Lang, '85.

WARD 5.

Henry L. Newhall, '85,
 Elwyn W. Lovejoy, '85,
 Wilson W. Carey, '85,
 Roswell M. Boutwell, '85.

WARD 6.

Lawrence J. Smith, '81, '82, '83,
 John E. Drury,
 Charles H. Hobson,
 Marcellus H. Fletcher, '84.

DAVID CHASE, *Clerk*.**1887.****Mayor:****JAMES C. ABBOTT. † '86.****Aldermen:**

Stephen B. Puffer, *'77, *'78, *'86, *C'n*,
 Nathan D. Pratt,
 Francis C. Plunkett,
 August Fels,

Peter H. Donohoe, '80, '81, *'84,
 Miles J. Fletcher, '82, *'83, *'84,
 Frederick Frye, '62, '63, *'68,
 Marcellus H. Fletcher, '84, '86.

DAVID W. O'BRIEN, *City Clerk*.**Common Council:****WARD 1.**

Michael J. Garvey,
 Dennis A. Sullivan,
 Daniel Murphy, '83, '84,
 Dennis J. Leary.

WARD 2.

Walter M. Sawyer, †'86,
 Charles H. Richardson, '79, '86,
 George C. Evans,
 Horace P. Beals.

WARD 3.

George B. McKenna,
 John Nolan, '84, '85,
 Daniel Cleary, '86,
 Patrick J. Smith, '83, '84, '85.

WARD 4.

Millard F. Wright,
 Edmund B. Conant,
 Jesse H. Shepard,
 Richard Dobbins.

WARD 5.

Roswell M. Boutwell, '86,
 George W. Brothers, '85,
 Clarence G. Coburn,
 James H. Carmichael, *Pres't*.

WARD 6.

Richard B. Allen,
 John E. Drury, '86,
 Patrick Conlon,
 Edward Gallagher.

WILLIAM J. COUGHLIN, *Clerk*.

1888.**Mayor:****CHARLES D. PALMER.****Aldermen:**

George A. Scribner,
George E. Putnam,
Charles Runels, '76,
Charles E. Carter,
Edward D. Holden,

Arthur Staples,
Roswell M. Boutwell, '86, '87,
Alfred M. Chadwick, *Chairman*,
'84, †'85.

GIRARD P. DADMAN, *City Clerk*.**Common Council:****WARD 1.**

Dennis A. Sullivan, '87,
Dennis J. Leary, '87,
Daniel Murphy, '83, '84, '87,
Michael J. Garvey, '87.

WARD 2.

Frank J. Sherwood,
Horace P. Beals, '87,
Harry E. Shaw,
Pierre A. Brousseau.

WARD 3.

John F. Rogers,
Owen M. Donohoe,
Thomas J. Sparks, '84, '85, '86,

*John F. Roane,
†Patrick H. Brosnahan.

*Resigned Aug. 9. Special Election to fill
vacancy Sept. 18.

†Elected Sept. 18 to fill vacancy.

WARD 4.

*Millard F. Wright, '87,
Edmund B. Conant, *President*, '87,
Jesse H. Shepard, '87,
Richard Dobbins, '87,
†Alonzo G. Walsh,
*Resigned April 24. Special Election
to fill vacancy June 5.
†Elected June 5 to fill vacancy.

WARD 5.

Charles C. Hartwell,
Clarence G. Coburn, '87,
George W. Brothers, '85,
Joseph S. Lapierre.

WARD 6.

William E. Westall,
Frank Brown,
Richard B. Allen, '87,
Abbott Lawrence.

DAVID CHASE, *Clerk*.**1889.****Mayor:****CHARLES D. PALMER. †'88.****Aldermen:**

George A. Scribner, *'88,
Walter M. Sawyer, †'86, '87,
George E. Putnam, *'88,
Edward D. Holden,

Roswell M. Boutwell, *Ch'n*, '86, '87, *'88,
John H. Fuller,
William F. Senter,
John E. Drury, '86, '87.

GIRARD P. DADMAN, *City Clerk*.**Common Council:****WARD 1.**

Patrick J. Savage,
Joseph H. Callahan,
Daniel H. Courtney,
William J. Johnson.

WARD 2.

*Samuel C. George,
Pierre A. Brousseau, '88,
Arthur H. Cluer,
Frank J. Sherwood, '88,
†James Stuart Murphy.

*Resigned June 9.

†Elected July 2, to fill vacancy.

WARD 3.

Owen M. Donohoe, '88,
Stephen Garrity,
Patrick H. Brosnahan, '88,
Thomas J. Sparks, '84, '85, '86, '88.

WARD 4.

B. Frank Hale,
Edwards Cheney,
Alonzo G. Walsh, '88,
Frank Gray.

WARD 5.

Orford R. Blood, '75, '76,
Charles C. Hartwell, '88,
Henry W. Ladd,
Henry J. Draper.

WARD 6.

William E. Westall, *Pres't*, '88,
Abbott Lawrence, '88,
Albert Crowell,
Frank Brown, '88.

DAVID CHASE, *Clerk*.

1890.

MAYOR :

CHARLES D. PALMER, †'88, †'89.

ALDERMEN :

Albert D. Carter,
Watson A. Dickinson,
John E. Drury, '86, '87, *'89.
Edmund D. Fletcher,

John H. Fuller, *'89, *Chairman.*
Walter M. Sawyer, †'86, '87, *'89,
Samuel E. Snow,
Joseph M. Wilson, '79, '80, '84,

GIRARD P. DADMAN, *City Clerk.*

COMMON COUNCIL :

WARD 1.

Joseph H. Callahan, '89,
Daniel H. Courtney, '89,
William J. Johnson, '89,
Patrick J. Savage, '89.

WARD 2.

Newell Abare,
Arthur H. Cluer, '89,
Walter C. Coburn,
James Stuart Murphy, '89.

WARD 3.

Patrick H. Brosnahan, '88, '89.
Robert C. Gallagher,
Charles L. Marren,
Thomas J. Sparks, '84, '85, '86, '88, '89.

WARD 4.

Edwards Cheney, '89,
Frank Gray, '89,
B. Frank Hale, '89,
Alonzo G. Walsh, '88, '89, *President.*

WARD 5.

Orford R. Blood, '75, '76, '89,
Herbert M. Jacobs,
Henry W. Ladd, '89,
Louis P. Turcotte.

WARD 6.

Albert Crowell, '89,
Daniel D. Driscoll,
James Gookin,
Edward F. Spalding.

DAVID CHASE, *Clerk.*

1891.

MAYOR :

GEORGE W. FIFIELD, *'83, *'84.

ALDERMEN :

Richard B. Allen, '86, '87,
James W. Cassidy,
Jeremiah Crowley, '70, '71, *'73 *'74,
*'77, *'78, *'84, *'86, *Chairman.*
Watson A. Dickinson, *'90.

Thomas J. Enright, '85, '86.
George H. Frye,
Stephen B. Puffer, *'77, *'78, *'86,
*'87,
George F. Tilton.

MICHAEL J. DOWD, *City Clerk.*

COMMON COUNCIL :

WARD 1.

Patrick H. Barry,
James F. Doherty,
John J. Sullivan,
Peter F. Garrity.

WARD 2.

Newell Abare, '90,
Adolphe Benard,
Walter C. Coburn, '90,
George H. Marston.

WARD 3.

Patrick J. Baxter,
John J. Gilbride,
Charles H. Marren, '90,
Thomas J. Sparks, '84, '85, '86, '88,
'89, '90, *President.*

WARD 4.

Edwin L. Giles,
Fred Horne,
Wallace G. Parkin,
Eugene C. Wallace.

WARD 5.

Herbert M. Jacobs, '90,
George D. Kimball,
James A. Speirs,
Louis P. Turcotte, '90.

WARD 6.

James A. Cawley,
James J. Dolan,
Daniel D. Driscoll, '90,
James Gookin, '90.

DAVID CHASE, *Clerk.*

ORDINANCES OF THE CITY OF LOWELL,
PASSED SINCE 1883.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-four.

AN ORDINANCE REGULATING THE ERECTION AND MAINTENANCE OF
WIRES IN STREETS AND WAYS.

Be it Ordained, by the City Council of the City of Lowell, as follows:

SECTION 1. The Mayor and Aldermen may give to telegraph, telephone, electric light, and other companies desirous of erecting and maintaining wires in the streets and ways of the city, instruments in writing specifying where in said streets and ways the posts of said companies may be located, the kind of posts, and the height to which, and the places where, the wires of said companies shall run. *Provided*, that no such company shall be permitted to erect or maintain their said wires in such positions as to cross from above any wire of the Lowell fire-alarm telegraph. And provided further, that any and all of said companies shall erect and maintain the top-most cross-bar on their said posts for the exclusive use of the wires of the said Lowell fire-alarm telegraph, and such other wires as the city may at any time attach thereto for its own use.

In Common Council, Dec. 10, 1884.

Passed to be ordained.

JOHN J. HOGAN, President.

In Board of Aldermen, Dec. 16, 1884.

Passed to be ordained.

ROBERT J. THOMAS, Chairman

Approved Dec. 31, 1884.

JOHN. J. DONOVAN, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-five.

AN ORDINANCE PROHIBITING THE SALE OR RENTAL OF CITY
PROPERTY BY CITY OFFICIALS.

Be it Ordained, by the City Council of the City of Lowell, as follows:

No property of the city of Lowell shall be sold, let or rented, or disposed of in any way by a superintendent of any department, or by a member of any committee, or by any officer or official whatever, or except by and in pursuance of a vote of an appropriate committee, or of the City Council.

And no property or material sold shall be delivered to the purchaser until the same has been paid for to the City Treasurer, and a receipted bill for the payment of the same shall be shown.

In Common Council, May 26, 1885.

Passed to be ordained.

A. M. CHADWICK, President.

In Board of Aldermen, June 2, 1885.

Passed to be ordained.

JOHN F. PHILLIPS, Chairman.

Approved.

EDWARD J. NOYES, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-five.

AN ORDINANCE TO REGULATE THE CONSTRUCTION, USE AND
REPAIRS OF WATER PIPES AND FIXTURES.

Be it Ordained, by the City Council of the City of Lowell, as follows:

SECTION 1. All plumbing and piping work done in the construction of all water pipes and fixtures, through which, or by means of which, water is furnished or distributed by the city, whether such pipes and fixtures belong to the city or not, shall be done by a plumber or piper licensed, as hereinafter provided, by the Board of Aldermen.

SECT. 2. Licenses for the purpose named in Section 1 may be granted for the term of one year to any plumber or piper, or firm of plumbers or pipers, or firms employing plumbers or pipers, upon the payment of a license fee of one dollar (\$1). Every person or firm so licensed shall give bonds to the city in the sum of three hundred dollars (\$300), with sureties, to be approved by the board of Aldermen, conditioned to perform all work in a skilful and workmanlike manner, to observe all rules and regulations now made or hereafter made by the Water Board, and to save the city harmless from all claims and damages resulting from imperfect or unskilful work, or negligence by them, their agents, or servants.

SECT. 3. The Water Board is hereby authorized to make such rules and regulations as to it shall seem fit, respecting plumbers and pipers and plumbing and piping work, in connection with water pipes and fixtures; *provided* that such rules and regulations are submitted to and approved by the Board of Aldermen.

SECT. 4. No person shall perform any labor in the nature of plumbing or piping upon or in connection with any water pipes

or fixtures through which or by means of which water is furnished or distributed by the city of Lowell, whether such pipes or fixtures are owned by the city or not, except under the authority of the license hereinbefore named, on pain of forfeiting a sum of not less than five dollars (\$5), nor more than twenty dollars (\$20), for each offense.

SECT. 5. No person shall remove or interfere with any water meter, unless especially authorized so to do by the Water Board, on pain of forfeiting a sum not less than five dollars (\$5), nor more than twenty dollars (\$20), for each offense.

SECT. 6. This act shall take effect from and after its passage.

In Common Council, July 14, 1885.

Passed to be ordained.

ALFRED M. CHADWICK, President.

In Board of Aldermen, July 21, 1885.

Passed to be ordained.

JOHN F. PHILLIPS, Chairman.

Approved July 22, 1885.

EDWARD J. NOYES, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-five.

AN ORDINANCE CHANGING THE TITLE OF AN OFFICER OF THE
CITY.

Be it Ordained, by the City Council of the City of Lowell, as follows:

That wherever the words "City Marshal" appear in the Revised Ordinances of the City of Lowell, the same be stricken out, and the words "Chief of Police" inserted in place thereof.

In Common Council, Dec. 31, 1885.

Passed to be ordained.

ALFRED M. CHADWICK, President.

In Board of Aldermen, Dec. 31, 1885.

Passed to be ordained.

JOHN F. PHILLIPS, Chairman.

Approved Dec. 31, 1885.

EDWARD J. NOYES, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-six.

AN ORDINANCE TO AMEND CHAPTER FOURTEEN OF THE REVISED
ORDINANCES OF 1883.

Be it Ordained, by the City Council of the City of Lowell, as follows:

That Sect. 2 of Chap. 14 of the Revised Ordinances of 1883 be amended as follows:—

By striking out the word “and” at the beginning of the second line and inserting in place thereof the word “the.”

By inserting after the word “council” in the same line, the words “and Superintendent of Public Schools.”

By striking out the words “one from each ward” in the third line and by striking out all after the word “years” in the eleventh line.

That Sect. 4 be amended by striking out all after the word “chosen” in the first line, and inserting the following: “In the month of December, 1886, and whenever a vacancy occurs, by a vote of the Board of Directors, a Librarian of the City Library, who shall hold his office until removed for cause.”

That Sect. 5 be amended by inserting after the word “said” at the beginning of the eighth line, the words “library and”

In Common Council, March 23, 1886.

Passed to be ordained.

WALTER M. SAWYER, President.

In Board of Aldermen, March 30, 1886.

Passed to be ordained.

JEREMIAH CROWLEY, Chairman.

Approved March 31, 1886.

JAMES C. ABBOTT, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-six.

AN ORDINANCE FOR THE REGULATION OF PLUMBING.

Be it Ordained, by the City Council of the City of Lowell, as follows:

SECTION 1. No person shall carry on the business of plumbing unless he shall have first registered his name and place of business in the office of the City Engineer, and notice of any change in the place of business of a registered plumber shall be immediately given to said City Engineer.

SECT. 2. Every plumber, before doing any work in a building, shall, except in the case of repairs or leaks, file at the office of the City Engineer, upon blanks to be provided by the Board of Health for the purpose, a notice of the work to be performed. No person shall commence work on such drainage, or plumbing, until the plans are approved by the Board of Health. Plans and specifications shall be approved or rejected within five days of the time of filing.

SECT. 3. The Board of Health must be notified when any work is ready for inspection, and all work must be left uncovered and convenient for examination until inspected and approved.

SECT. 4. Every building shall be separately and independently connected with the common sewer, or cesspool, said cesspool to be approved by the Board of Health.

SECT. 5. Drains and soil-pipes, through which water and sewage is used and carried, shall be of iron, or Akron, or cement drain-pipe, to be approved by the Board of Health when within a building. They shall be supplied with a suit-

able trap placed with an accessible clean-out, either outside or inside the foundation wall of the building. There shall be a fresh air inlet pipe entering the soil-pipe or drain on the house side of the main trap of not less than four inches internal diameter. All soil-pipes shall be carried out through the roof, open and undiminished in size, in such height as may be directed by the Board of Health, but no soil-pipe shall be carried to a height less than two feet above the roof.

SECT. 6. Every sink, basin, bath-tub, water-closet, slop-hopper, and each set of trays, and every fixture having a waste-pipe, shall be furnished with a trap, which shall be placed as near as practicable to the fixture that it serves. Traps shall be protected from siphonage, or air pressure by special air-pipes of a size not less than the waste-pipe; but air-pipes from water-closet traps shall be of not less size than two-inch bore for thirty feet or less, and not less than three-inch bore for more than thirty feet, and shall be run as direct as practicable.

SECT. 7. Drip or overflow pipes from safes under water-closets and other fixtures, or from tanks or cisterns, shall be run to some place in open sight, and in no case shall any such pipe be connected directly with a drain waste-pipe or soil-pipe. Water-pipe from refrigerators, or other receptacles in which provisions are stored, shall not be connected with a drain soil-pipe or other waste-pipe.

SECT. 8. Every water-closet, or line of water-closets on the same floor, shall be supplied with water from a tank or cistern, and the flushing-pipe shall not be less than one inch in diameter; *provided*, that where it is impracticable by reason of frost, the Board of Health may give a written permission for other service.

SECT. 9. The provisions of Sections 3 to 9 inclusive of this

ordinance shall apply only to buildings erected, or to work performed after its passage.

In Common Council, April 27, 1886.

Passed to be ordained.

WALTER M. SAWYER, President.

In Board of Aldermen, May 18, 1886.

Passed to be ordained.

JEREMIAH CROWLEY, Chairman.

Approved May 20, 1886.

JAMES C. ABBOTT, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-seven.

AN ORDINANCE AMENDING SECTION ONE, CHAPTER TWENTY, OF
THE ORDINANCES RELATING TO ELECTION OF CHIEF ENGINEER
OF FIRE DEPARTMENT.

Be it Ordained, by the City Council of the City of Lowell, as follows:

That Chap. 20, Sect. 1, of the City Ordinances be, and the same hereby is, amended as follows, viz.: By inserting between the word "require" in the fifth line of said section, and the word "and" in the sixth line, the following words:—

"The Chief Engineer shall be appointed by the Mayor and Aldermen in the month of March or April, and whenever a vacancy occurs, and he shall enter upon the discharge of the duties of said office on the first day of May of the year in which appointed, if appointed for a full term, prior to May of any year, and he shall hold said office for the term of three years, from said first day of May, or until he is removed, and if appointed after the first day of May of any year, he shall enter upon the discharge of the duties of said office forthwith, and shall continue therein until the expiration of the full term as existing at the time of his said appointment, or until removed."

And by inserting the word "assistant" between the word "said" and the word "engineers" in the sixth line of said section.

And by inserting between the words "member" and "no" in the sixteenth line of said section, the following words, viz.:

“Except that the Chief Engineer shall not be removed without a hearing and cause shown thereat.”

In Common Council, Oct. 11, 1887.

Passed to be ordained.

JAMES H. CARMICHAEL, President.

In Board of Aldermen, Nov. 8, 1887.

Passed to be ordained.

STEPHEN B. PUFFER, Chairman.

Approved Nov. 11, 1887.

JAMES C. ABBOTT, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-seven.

AN ORDINANCE TO AMEND CHAPTER NINE OF THE REVISED
ORDINANCES.

Be it Ordained, by the City Council of the City of Lowell, as follows:

That Section 1. Chap. 9, of the Revised Ordinances be, and the same is, hereby amended, by striking out the "word" "February" and inserting instead thereof the word "April."

In Common Council, Nov. 14, 1887.

Passed to be ordained.

JAMES H. CARMICHAEL, President.

In Board of Aldermen, Nov. 21, 1887.

Passed to be ordained.

STEPHEN B. PUFFER, Chairman.

Approved.

JAMES C. ABBOTT, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-seven.

AN ORDINANCE AMENDING THE ORDINANCES OF THE CITY OF LOWELL, AND DEFINING AND LIMITING THE POWERS OF STANDING COMMITTEES.

Be it Ordained, by the City Council of the City of Lowell, as follows:

SECTION 1. All standing committees of the City Council, or of either branch thereof, shall act only in committee meeting duly assembled, and no business other than to adjourn shall be transacted at any committee meeting, unless a majority of the committee shall be actually present.

SECT. 2. As speedily as possible after their appointment, each committee shall organize by the choice of one of their number as secretary, whose duty it shall be to keep a true and accurate record of the doings of his committee in a record book, to be kept for that purpose; which book, at the expiration of the year, shall be by the secretary deposited either with the city clerk, or the chief executive officer of the department to which the record relates, to be by said city clerk, or said chief executive officer, turned over to the newly appointed committee.

The city solicitor shall keep a docket, giving the names of the parties who have brought actions against the city, or against whom the city has any action pending. He shall also keep another record of cases properly indexed; the name and residence of each witness to be written in said record, and the substance of what said witness will testify to, shall also be inscribed in said book; and, if possible, the same shall be signed by the witness. The docket, record-book, and all briefs shall at the expiration of the city solicitor's term of office, be handed to his successor, and shall be the property of the City of Lowell.

SECT. 3. It shall in general be the duty of each of the standing committees to exercise a close supervision over all matters of detail, relating to their respective departments, coming before them in the regular course; to inform themselves as nearly as may be, and at as early a date after their appointment as possible, as to the amount of appropriation required to properly manage the affairs of their respective departments for the ensuing year, and to cause the same to be reported by written statement, which shall be itemized as closely as practicable to the committee on appropriation, to be by said committee used as a basis from which to make up their annual appropriations, and to approve no bills to be paid from their respective appropriations, save only such as may relate to their respective departments, and have been duly contracted by them or by their authority.

SECT. 4. They may make contracts relating to their respective departments, and shall see to it that in all cases the provisions of Chapter Sixteen of the City Ordinances shall be strictly observed; *provided*, that they shall not by contract incur debts amounting in the aggregate to a larger sum than the unexpended amount of their appropriation for the current year; nor shall any such committee, except the joint standing committee on streets and the standing committee on sewers, make, or authorize the making of, any contracts involving the creation of a debt against the city exceeding two thousand dollars in amount, or if a continuing contract, one which shall extend beyond the municipal year for which said committee may have been appointed, unless they shall have been expressly authorized so to do by resolution, order, or vote of the main body of the council, from which said committee shall have been appointed.

SEC. 5. The direction which, by the terms of Chapter Thirty-five, City Ordinances, the committee on streets is authorized to exercise over the superintendent of streets in the constructing, maintaining, repairing and caring for public streets, ways, and bridges, and the making of contracts for labor and

materials required therein, and in the building of sidewalks, shall be extended as far as to vest in said committee, exclusive of the said superintendent, all matters of detail regarding the purchase of supplies and materials to be used in the building, maintaining, repairing, and taking care of either streets, bridges, or sidewalks, and the purchase, keeping, or caring for any and all property belonging to, or employed in, said department; and said superintendent shall submit to said committee for their approval any contemplated purchase of supplies, material, or property of any kind for said department, the cost of which shall exceed one hundred dollars, and such contract of purchase shall not become binding on the city until duly approved by said committee.

SECT. 6. Said committee on streets shall determine as to the order in which work on the different streets, ways, and sidewalks, whether in constructing or repairing the same, shall be done; when work shall be begun and when stopped; *provided*, that no work of new construction of either streets, bridges, or sidewalks shall be undertaken unless there shall be an unexpended balance to the credit of the appropriation of the department, or unless specially authorized by express vote of the City Council.

SECT. 7. Said committee shall determine as to the number of laborers to be employed in said department, and may, if in their judgment the interest of the department requires it, create or discontinue positions of authority in the department subordinate to that of superintendent; but the direction which the committee shall exercise over the working of the department shall not extend so far as to permit said committee, or any member thereof, directly or personally, to employ or discharge any officer or workman employed therein.

SECT. 8. It shall be the duty of this committee to see to it, by suitable directions given to the said superintendent, that in addition to other ordinary repairs of streets, all sidewalks on public ways, adjoining property of the city including the side-

walks on such bridges as are public ways, shall be kept clear from ice and snow, and in a reasonably safe and convenient condition for travelling thereon; and the bills incurred in this work shall be paid from the appropriation of the street department.

SECT. 9. Annually, prior to the making of the annual appropriations, said committee shall consider the rate of wages paid to the different grades of employes in the street department, with the view of ascertaining whether the same is just and reasonable, or otherwise; and if, in the judgment of said committee, said rate should be in any particular altered, they shall report thereon, with their recommendations, to the City Council, and said committee may so consider and report on said subject at any other time during the year.

SECT. 10. In ascertaining the powers which the committee on sewers shall exercise in the constructing, maintaining, and repairing of main drains and common sewers, or in contracting for labor or materials to be used therein, the same rule shall be, in all respects, applied as has been hereinbefore laid down with respect to the committee on streets, except that the report to be made annually concerning the rate of wages to be paid to employes on the sewer department, shall be made to the Board of Aldermen instead of to the City Council.

SECT. 11. All contracts for the furnishing of supplies or materials, or for the purchase of any property by the city for use in the police department, to an amount exceeding one hundred dollars, shall be made only by the authority of the committee on police.

SECT. 12. The employing and fixing the pay of whatever help or assistance of a permanent nature may be required in the custody or control of prisoners, the care of the station-house, or the property belonging to the city and used in connection with the police department, other than that afforded by the regular members of the police force, including the police matron, shall be in said committee on police.

SECT. 13. All nominations of persons to serve as police officers and watchmen, whether designated as regular officers, special officers, or supernumeraries, shall, before action thereon by the Board of Aldermen, be referred to the committee on police, to be by them reported back to the Board of Aldermen, with their recommendations, at or before the next regular meeting of said board.

SECT. 14. All petitions for the appointment or removal of police officers or watchmen, whether referring to regular, special, or supernumerary officers, and all charges or matters coming before the Board of Aldermen and specially relating to the members of the police department, or any of them, shall, before any action thereon is taken by the board, be referred to the committee on police, unless such may have already been considered reported by said committee.

SECT. 15. No member of the police force shall be fined or suspended from duty for any indefinite period, except with the approval (to be indicated by their vote) of said committee on police; *provided*, that the chief of police may, for cause sufficient in his judgment, suspend any police officer until such time as he may cause the said committee to be convened to investigate as to the propriety of such suspension.

SECT. 16. The committee on lands and buildings shall have in general charge the construction and all repairs and the making of all contracts relating to labor and material used in the construction and repairing of all buildings belonging to the city, to whatever department's use said buildings may be especially designed or designated, save only such construction or repairing as the City Council may, by resolution, order, or vote, especially authorize to be let out by contract; or such work in the nature of minor repairs as may be done by persons regularly employed in the department, to whose use such buildings are especially designated.

SECT. 17. Whenever such work, whether in the way of construction of new, or repairs in old buildings, shall be so done

under the general charge of said committee on lands and buildings, all bills contracted in the same, whether for labor, or materials, or both, shall be paid from said committee's appropriation; *provided*, that by express agreement between said committee and the committee having in charge the department specially benefited by said work, the whole or any part of said bills may be charged to the appropriation of said last-named committee; in which case, bills so charged shall be approved before payment, by both of said committees.

SECT. 18. In ascertaining the powers which the committee on lands and buildings shall exercise in such work of construction or repairs as may be undertaken by them, or in contracting for labor or materials to be used therein, the same rule shall be in all respects applied as has been hereinbefore laid down with respect to the committee on streets.

SECT. 19. All contracts for the furnishing of supplies or materials, or for the purchase or keeping of any property by the city for use in the fire department, to an amount exceeding one hundred dollars, shall be made only by authority of the committee on fire department.

SECT. 20. All contracts of or concerning any of the city printing or advertising, save only such as are by law made subject to the Board of Aldermen exclusively, to whatever department of the city said printing or advertising especially relates, shall be made only under the authority of the committee on printing, and shall be paid for from said committee's appropriation.

[This section shall go into effect on the first Monday of January, 1888.]

SECT. 21. No member of either branch of the City Council shall be eligible to the office of overseer of the poor.

[This section shall take effect on the first Monday of January, 1888.]

SECT. 22. Revised Ordinances, Chap. 1, Sect. 13, is hereby amended as follows, viz.: By striking out the word "November"

in the second line, and substituting in place thereof the following words, viz.: "December, and after the annual municipal election shall have been held;" and by inserting between the word "established" and the word "and" in the fifth line, the following words, viz.: "Provided, that in case any new office shall be created, the salary of said newly created office may be fixed at any time."

SECT. 23. No owner, driver, or other person having the care or ordering of a vehicle upon Prescott street, or that part of Merrimack street between John street and Bridge street, or that part of Central street between Merrimack street and Market street, at any time between the hours of eight A. M. and nine P. M., shall suffer the same to stop for more than five minutes without some proper person to take care of the same, nor for more than ten minutes in any case; but the foregoing provisions shall not apply to carriages of physicians while engaged in their business.

SECT. 24. No owner, driver, or other person having the care or ordering of a vehicle upon any public street or way in the city, shall stop or place it at or near the intersection of two or more streets in such a manner as to cross a footway, a flagstone, or to prevent foot passengers from passing along a street in the direction or line of the footway or flagstone thereon.

SECT. 25. Every driver of a vehicle upon any public street in the city shall remain near it while it is unemployed or standing, unless he is necessarily absent in the course of his duty and business, and he shall so keep his horse or horses and vehicle as not to obstruct the streets.

SECT. 26. No owner, driver, or other person having the care or ordering of a vehicle, shall hitch or fasten the horse or horses attached thereto, to any street lamp-post upon any of the public ways of the city.

SECT. 27. Any person who shall offend against any of the

provisions of the foregoing sections, from twenty-three to twenty-six, both inclusive, shall be punished for each offense by a fine not exceeding twenty dollars.

In Board of Aldermen, Dec. 30, 1887.

Passed to be ordained.

STEPHEN B. PUFFER, Chairman.

In Common Council, Dec. 30, 1887.

Passed to be ordained.

JAMES H. CARMICHAEL, President.

Approved.

JAMES C. ABBOTT, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-eight.

AN ORDINANCE TO AMEND THE ORDINANCE, ENTITLED: AN ORDINANCE AMENDING THE ORDINANCES OF THE CITY OF LOWELL, AND DEFINING AND LIMITING THE POWERS OF STANDING COMMITTEES.

Be it Ordained, by the City Council of the City of Lowell, as follows:

That Sect. 2 of the Ordinance amending the Ordinances of the City of Lowell, and defining and limiting powers of standing committees, be, and the same hereby is, amended as follows: By inserting after the word "Committee" and before the word "shall," in the second line, the words "except the joint standing committee on streets and the standing committee on sewers."

In Common Council, Feb. 14, 1888.

Passed to be ordained.

E. B. CONANT, President.

In Board of Aldermen, Feb. 14, 1888.

Passed to be ordained.

A. M. CHADWICK, Chairman.

Approved Feb. 15, 1888.

CHARLES D. PALMER, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-eight.

AN ORDINANCE RESTRICTING THE DISTRIBUTION OF HAND BILLS,
CIRCULARS, PROGRAMMES, AND ADVERTISING SLIPS.

Be it Ordained, by the City Council of the City of Lowell, as follows:

That no person shall cause to be distributed any hand bill, circular, programme, or advertising slip in or upon any street or sidewalk in the city, excepting that such hand bill, circular, programme, or advertising slip may be placed within the doors, of stores, offices, and business houses, and at the doors of residences.

Any person who shall offend against any of the provisions of this ordinance shall be punished for each offence by a fine not exceeding twenty dollars.

In Common Council, July 17, 1888.

Passed to be ordained.

E. B. CONANT, President.

In Board of Aldermen, Aug. 3, 1888.

Passed to be ordained.

A. M. CHADWICK, Chairman.

Approved Aug. 3, 1888.

CHARLES D. PALMER, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-eight.

AN ORDINANCE TO AMEND SECTION EIGHT OF CHAPTER TWENTY
OF THE REVISED ORDINANCES OF THE CITY OF LOWELL.

Be it Ordained, by the City Council of the City of Lowell, as follows:

SECTION 1. That Sect. 8 of Chap. 20 of the Revised Ordinances of the City of Lowell be, and the same is, hereby amended by inserting in the first line thereof, after the word "engineer," and before the word "to," the words "who may appoint some members of the Fire Department to assist him in such duty."

In Common Council, Aug. 16, 1888.

Passed to be ordained.

E. B. CONANT, President.

In Board of Aldermen, Aug. 21, 1888.

Passed to be ordained.

A. M. CHADWICK, Chairman.

Approved Aug. 21, 1888.

CHARLES D. PALMER, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-eight.

AN ORDINANCE PROHIBITING THE THROWING OF FRUIT, VEGETABLES, ETC., ON SIDEWALKS OR CROSSWALKS.

Be it Ordained, by the City Council of the City of Lowell, as follows:

SECTION 1. Any person who shall cast, throw, place or deposit on any sidewalk or crosswalk in any street, avenue, or public place within the corporate limits of the City of Lowell, any part or portion of any fruit or vegetable or other substance, which, when stepped upon by any person, is liable to cause, or does cause, such person to slip or fall, shall be punished by a fine not exceeding twenty dollars.

SECT. 2. The proprietor of every store or other place where fruit, vegetables, or other substances mentioned in the preceding section of this ordinance are sold, or kept for sale, shall keep suspended therein or posted thereon in some conspicuous place, constantly, a copy of sections one and two of this ordinance, printed in large type, so that persons purchasing any such fruit, vegetable, or other substances may become aware of their provisions, and every proprietor refusing or neglecting to comply with the provisions of this section shall be fined not exceeding twenty dollars.

In Common Council, Aug. 16, 1888.

Passed to be ordained.

E. B. CONANT, President.

In Board of Aldermen, Aug. 21, 1888.

Passed to be ordained.

A. M. CHADWICK, Chairman.

Approved Aug. 21, 1888.

CHARLES D. PALMER, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-eight.

AN ORDINANCE TO AUTHORIZE THE NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY OF MASSACHUSETTS, ITS SUCCESSORS AND ASSIGNS, TO LAY AND MAINTAIN UNDERGROUND CONDUITS, CABLES, WIRES, AND MANHOLES, AND TO ERECT AND MAINTAIN DISTRIBUTING POLES.

Be it Ordained, by the City Council of the City of Lowell, as follows:

SECTION 1. The New England Telephone and Telegraph Company of Massachusetts, its successors and assigns, are hereby authorized to construct and maintain underground conduits, cables and wires for the conduct of its business in the following streets: Middle street, Market street, Central street, from Merrimack to Tower's corner, and Middlesex street, from Tower's corner to Thorndike street, to construct therein and maintain the necessary manholes and house connections; also to erect and maintain distributing poles at the termini of such said conduits, and at suitable distributing points; all work to be done in accordance with the regulations hereinafter provided.

SECT. 2. The said company shall lay conduits in any other street or streets which may be hereafter designated by the Board of Aldermen, and in which street or streets said company maintains or wishes to maintain electric cables or lines of wire, to the number of 100 or more conductors, and within which said streets the Board of Aldermen may deem it for the interest of the city to have said wires placed underground, and within such reasonable time in each case as the Board of Aldermen shall determine.

Wires to the number of 50 or more in any street shall be placed in aerial cable, if so ordered by the Board of Aldermen.

SECT. 3. The said conduits shall be of suitable kind and

construction, such as are in successful operation for similar purpose in other cities, and the work shall be done in a thorough manner, and to the approval of the Board of Aldermen, or any officer of the city whom the Board may select. The said distributing and other poles shall be of such height and other dimensions, and of such form and material, as shall be satisfactory to the Board of Aldermen, and shall be subject to their approval or the approval of any person or persons whom the Board of Aldermen may select.

SECT. 4. The surface of a street shall not be disturbed for the purpose of laying, repairing, or removing wires or conduits, or erecting or removing distributing or other poles, without a permit from the Board of Aldermen indicating the time, manner, and place of opening such street, and the time within which such work shall be completed.

But this provision shall not be construed as requiring any permit for the opening of manholes for the purpose of drawing in, removing, or repairing wires and cables.

SECT. 5. When an opening is made in a street for any of the purposes aforesaid, the portion of the street so opened shall be restored to a condition satisfactory to the City Engineer and Surveyors of Highways, and shall be kept in such condition for one year thereafter, and if not so restored and maintained by said company said Surveyors of Highways may cause the same to be done at the expense of said company.

SECT. 6. The said company, in laying, repairing, or removing its wires or conduits, shall not disturb or in any way interfere with any gas or water pipes, or sewers, or pipes therewith connected.

SECT. 7. In case the City of Lowell hereafter finds it necessary to construct or enlarge sewers or other public works in streets where conduits are laid, which shall require the removal or changing the location of said conduit, said removing or changing shall be at the expense of said company.

SECT. 8. The said company shall commence the work contemplated herein within six months from the passage of this ordinance, unless restrained by process of law, and shall continue the said work with reasonable diligence until suitable conduits have been laid in such of the above named streets as said parties may elect, or the Board of Aldermen may require under the provisions of Section 2.

SECT. 9. The said company shall not remove its conduits unless permitted to do so by the Board of Aldermen.

SECT. 10. The said company shall remove its conduits to other suitable locations whenever ordered to do so by the Board of Aldermen.

SECT. 11. No permit shall be granted, or, if granted, shall be valid, to disturb the surface of a street for any of the purposes aforesaid until said company has executed an agreement in a form satisfactory to the City Solicitor, providing,

First: That in every underground conduit constructed by the company sufficient and necessary space shall be reserved, free of expense, for the use of the fire, police, and other signal wires belonging to the city, and used exclusively for municipal purposes, and that the fire and police department, by their electrical superintendent, shall be allowed access to said conduits at all times, and that said department shall be allowed facilities and privileges in putting in or taking out wires equal in all respects to those of the said Telephone and Telegraph Company.

Second: That said company will indemnify and save the city harmless against all damages, costs, and expense whatsoever to which the city may be subjected in consequence of the acts or neglects of said company, its agents, or servants, or in any manner arising from the rights and privileges granted it by the city.

Third: In addition to the aforesaid agreement, said company shall, before a street is disturbed for the laying of its wires or conduits, execute a bond, with surety or sureties in

a penal sum of not less than \$10,000, conditioned to fulfil all its said agreements with the city and its duties under this ordinance, and a new bond of like import may at any time be required of said company by the City Council, which new bond shall be a strengthening bond, unless the surety or sureties on former bonds are expressly released from further liability by vote of the City Council.

In Common Council, Dec. 31, 1888.

Passed to be ordained.

E. B. CONANT, President.

In Board of Aldermen, Jan. 4, 1889.

Passed to be ordained.

A. M. CHADWICK, Chairman.

Approved Jan. 4, 1889.

CHARLES D. PALMER, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-eight.

AN ORDINANCE AMENDING CHAPTER THIRTY-NINE OF THE
REVISED ORDINANCES.

Be it Ordained, by the City Council of the City of Lowell, as follows:

SECTION 1. Sect. 1 of Chap. 39 of the City Ordinances is hereby amended so as to read as follows:

SECTION 1. The members of the Lowell Water Board shall be five in number, and shall be chosen in the manner following: In the month of January or February next, there shall be chosen by concurrent vote of both branches of the City Council three citizens of Lowell, neither of whom shall hold any other municipal office, to be members of said Water Board, one of whom shall hold office for four years and one for three years from the second Monday of March next following their election; and one to hold office from the first Monday of May next following his election until the second Monday in March in the year 1891, or until their successors are chosen.

In the month of January or February in the year 1890 there shall be chosen by concurrent vote of both branches of the City Council, one citizen of Lowell, who shall hold no other municipal office, to be a member of said Water Board, to serve from the first Monday of May next following his election until the second Monday of March in the year 1894, or until his successor is chosen; and in the month of January or February in the year 1891, and annually thereafter, there shall be chosen, in the manner above provided, one citizen of Lowell, who shall hold no other municipal office, to be a member of said Water Board, to serve for the term of four years from the second Monday of March next following his election, or until his successor is chosen. In the month of January next, and

annually thereafter in said month, there shall be chosen by concurrent vote of both branches of the City Council, one member of the Board of Aldermen to be a member of said Water Board, and who shall enter upon his duties as member of said Board forthwith, and hold office during the remainder of the municipal year in which he is elected, or until his successor is elected.

The members elected to said Board from the Board of Aldermen and the citizens at large, shall at all times be subject to removal by the City Council. The acceptance of any other municipal office by a member of said Board shall be deemed to constitute a vacancy in said Board. Vacancies for any cause may be filled at any time by the City Council.

SECT. 2. Sect. 2 of the said Chap. 39 is hereby amended so as to read as follows:

SECT. 2. On the second Monday of March, in the year 1889, the members of the said Water Board shall meet and organize by choosing one of their number, elected from the citizens, to be president of the Water Board, whose term of office shall be from the first Monday of May in said year until the second Monday of March, 1890, or until his successor is chosen.

And on the second Monday of March, 1890, and annually thereafter, the members of said Water Board shall meet and organize by choosing one of their number, elected from the citizens, to be president of the Board, who shall hold his office for one year from the time of his election, or until his successor is chosen. He shall receive such compensation for his services as president as the City Council may from time to time determine. They shall, in the Month of March, annually, choose a superintendent of Water Works, who shall hold his office from April first in the year of his election, until another is elected in his place, unless sooner removed. He shall receive such compensation as superintendent as the City Council may from time to time determine. They shall, in the month of June, annually, choose a clerk, who shall also be secretary of

the Board, and who shall hold his office for one year, or until his successor is chosen. The superintendent and clerk may for cause be removed at any time by the Board. Neither the superintendent nor the clerk shall be members of the Water Board. Said Board may also make such rules and regulations for their own government and for the government of all subordinate officers, by them appointed, as they may deem expedient, not inconsistent with the Statute Law or City Ordinances.

SECT. 3. This ordinance shall take effect upon its passage, and all ordinances, or parts of ordinances, inconsistent therewith are hereby repealed.

In Common Council, Jan. 4, 1889.

Passed to be ordained.

E. B. CONANT, President.

In Board of Aldermen, Jan. 4, 1889.

Passed to be ordained.

A. M. CHADWICK, Chairman.

Approved Jan. 4, 1889.

CHARLES D. PALMER, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-nine.

AN ORDINANCE AMENDING AN ORDINANCE AMENDING CHAPTER
THIRTY-NINE OF THE REVISED ORDINANCES.

Be it Ordained, by the City Council of the City of Lowell, as follows:

That the ordinance amending Chap. 39 of the Revised Ordinances be, and the same hereby is, amended as follows: By striking out the word "next" in the twenty-eighth line and inserting in place thereof the words and figures "or February, 1889," and by striking out the word "month" in the twenty-ninth line and inserting the word "months" in place thereof.

In Common Council, Feb. 19, 1889.

Passed to be ordained.

THOMAS J. SPARKS, President *pro tem*.

In Board of Aldermen, Feb. 19, 1889.

Passed to be ordained.

R. M. BOUTWELL, Chairman.

Approved Feb. 19, 1889.

CHARLES D. PALMER, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-nine.

AN ORDINANCE RELATING TO CHAPTER TWENTY, SECTION ONE,
OF THE REVISED ORDINANCES.

Be it Ordained, by the City Council of the City of Lowell, as follows:

SECTION 1. Sect. 1 of Chap. 20 of the City Ordinances is hereby ordained to read as follows:

SECTION 1. The Fire Department shall consist of a Chief Engineer, four Assistant Engineers, and as many engine-men, hose-men, hook and ladder men, and other persons, to be divided into companies, as the number of engines and the other fire apparatus of the city shall from time to time require; the Chief Engineer shall be appointed by the Mayor and Aldermen, in the month of March or April, and whenever a vacancy occurs, and he shall enter upon the discharge of the duties of said office on the first day of May of the year in which appointed, if appointed for a full term prior to May of any year, and he shall hold said office for the term of three years from said first day of May, or until he is removed; and if appointed after the first day of May of any year he shall enter upon the discharge of the duties of said office forthwith, and shall continue therein until the expiration of the full term as existing at the time of his said appointment, or until removed; and the appointment of said Assistant Engineers shall be made by the Mayor and Aldermen in the month of March or April, annually, and whenever a vacancy occurs; and they shall hold their respective offices for the term of one year from the first day of May succeeding their appointment, or until others are chosen; all other members of the Fire Department shall be nominated by the Board of Engineers, and their names sent to

the Mayor and Aldermen, and when by them appointed they shall be members of the Fire Department; *provided*, that vacancies may be filled at any time, and that the Mayor and Aldermen may at any time remove any or all of said officers or members; except that the Chief Engineer shall not be removed without a hearing and cause shown thereat. No person shall be appointed a member of the Fire Department who does not sustain a good moral character, and who is not a citizen of the City of Lowell.

SECT. 2. This ordinance shall take effect upon its passage, and Sect. 1 of Chap. 20 of the City Ordinances, together with each and every amendment thereto, is hereby repealed.

In Common Council, June 11, 1889.

Passed to be ordained.

WILLIAM E. WESTALL, President.

In Board of Aldermen, June 14, 1889.

Passed to be ordained.

JOHN H. FULLER, Chairman *pro tem*.

Approved June 22, 1889.

CHARLES D. PALMER, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty-nine.

AN ORDINANCE AMENDING CHAPTER ONE OF THE REVISED
ORDINANCES.

Be it Ordained, by the City Council of the City of Lowell, as follows:

That Sect. 6 of Chap. 1 of the Revised Ordinances be, and the same is, hereby amended by striking out after the word "and" in the eleventh line the words "one member of the Lowell Water Board elected from the Common Council," and inserting instead thereof the words "the Joint Standing Committee on Commons."

In Common Council, Jan. 3, 1890.

Passed to be ordained.

THOMAS J. SPARKS, President *pro tem*.

In Board of Aldermen, Jan. 3, 1890.

Passed to be ordained.

R. M. BOUTWELL, Chairman.

Approved Jan. 3, 1890.

CHARLES D. PALMER, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Ninety.

AN ORDINANCE AMENDING CHAPTER FIVE OF THE ORDINANCES
OF THE CITY OF LOWELL.

Be it Ordained, by the City Council of the City of Lowell, as follows:

That Sect. 12 of Chap. 5 of the Ordinances of the City of Lowell be, and the same hereby is, amended as follows, to wit: By inserting after the word "Street," and before the word "provided," in the eleventh line of said section, the words "nor on either side of Bridge street north of Merrimack River, south of Seventh or West Sixth streets for a distance of seventy-five feet back from either line of said Bridge street."

In Common Council, Jan. 3, 1890.

Passed to be ordained.

THOMAS J. SPARKS, President *pro tem*.

In Board of Aldermen, Jan. 3, 1890.

Passed to be ordained.

R. M. BOUTWELL, Chairman.

Approved Jan. 3, 1890.

CHARLES D. PALMER, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Ninety.

AN ORDINANCE PROVIDING FOR THE ELECTION OF ASSESSORS AND
THE APPOINTMENT OF ASSISTANT ASSESSORS.

Be it Ordained, by the City Council of the City of Lowell, as follows:

SECTION 1. There shall be chosen by concurrent vote of both branches of the City Council, in the month of April, May, or June of the current year, three Assessors, one to serve for a term beginning with the date of his election, and ending the first Monday of January, 1893, one to serve for a term beginning at the date of his election, and ending the first Monday in January, 1892, and one to serve for a term beginning at the date of his election, and ending the first Monday of January, 1891; and in the month of January or February, 1891, and in each succeeding year thereafter, there shall be elected one Assessor, to serve for the term of three years from the first Monday in January of the year in which he is chosen. In case of a vacancy in the Board of Assessors from any cause, the City Council shall fill said vacancy by electing a member to serve for the remainder of the unexpired term.

SECT. 2. In the month of April, May, or June of the current year there shall be nominated by the Mayor, and confirmed by the Board of Aldermen, one Assistant Assessor from each ward (said Assistant Assessor to be a resident therein), to serve for the remainder of the current year, and in the month of January or February in the year 1891, and in every second year thereafter, there shall be nominated by the Mayor, and confirmed by the Board of Aldermen, one Assistant Assessor from each ward (said Assistant Assessor to be a resident therein), to serve for the term of two years from the first Monday in January of the year in which they are appointed. In

case of a vacancy occurring in the Board of Assistant Assessors, there shall be nominated by the Mayor, and confirmed by the Board of Aldermen, a member to serve for the remainder of the unexpired term. Said Assistant Assessors shall assist the Assessors in the assessment of taxes, and in any duties relating to said assessment, and shall at all times act under the direction and control of the Assessors.

Said Assessors and Assistant Assessors to be sworn to a faithful performance of their duties.

Said Assessors shall be removable at the pleasure of the City Council, and said Assistant Assessors at the pleasure of the Board of Aldermen.

SECT. 3. Section 1 of Chapter 3 of the charter and ordinances, and all ordinances and parts of ordinances inconsistent with this ordinance, are hereby repealed.

In Common Council, April 22, 1890.

Passed to be ordained.

ALONZO G. WALSH, President.

In Board of Aldermen, April 29, 1890.

Passed to be ordained.

JOHN H. FULLER, Chairman.

Approved May 1, 1890.

CHARLES D. PALMER, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Ninety.

AN ORDINANCE AMENDING CHAPTER THIRTY-THREE OF THE
ORDINANCES OF THE CITY OF LOWELL.

Be it Ordained, by the City Council of the City of Lowell, as follows:

That Section 15 of Chapter 33 of the Ordinances of the City of Lowell be, and the same hereby is, amended by striking out the words "Board of Aldermen" wherever they occur and inserting instead thereof the words "Superintendent of Streets."

In Common Council, May 20, 1890.

Passed to be ordained.

ALONZO G. WALSH, President.

In Board of Aldermen, May 27, 1890.

Passed to be ordained.

JOHN H. FULLER, Chairman.

Approved June 2, 1890.

CHARLES D. PALMER, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Ninety-one.

AN ORDINANCE EXTENDING THE LIMITS OF THE FIRE DISTRICT
OF THE CITY OF LOWELL.

Be it Ordained, by the City Council of the City of Lowell, as follows:

That the limits of the Fire district of the City of Lowell be, and the same are hereby extended, as follows: Beginning at the junction of the middle line of Appleton street with the middle line of South street, thence southerly along the middle line of South street to the middle line of Summer street, thence easterly along the middle of Summer and Charles streets to the middle line of Central street, then northerly along the middle line of Central street to Appleton street, thence westerly along the middle line of Appleton street to the point of beginning.

In Common Council, May 12, 1891.

Passed to be ordained.

THOMAS J. SPARKS, President.

In Board of Aldermen, May 19, 1891.

Passed to be ordained.

JEREMIAH CROWLEY, Chairman.

Approved June 8, 1891.

GEORGE W. FIFIELD, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Ninety-one.

AN ORDINANCE REPEALING SECTION SIX OF CHAPTER NINE OF
THE REVISED ORDINANCES OF 1883.

Be it Ordained, by the City Council of the City of Lowell, as follows :

That Section 6 of Chapter 9 of the Revised Ordinances of
1883, be, and the same hereby is, repealed.

In Common Council, May 12, 1891.

Passed to be ordained.

THOMAS J. SPARKS, President.

In Board of Aldermen, May 19, 1889.

Passed to be ordained.

JEREMIAH CROWLEY, Chairman.

Approved June 8, 1891.

GEORGE W. FIFIELD, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Ninety-one.

AN ORDINANCE AMENDING CHAPTER FIVE, OF THE ORDINANCES
OF THE CITY OF LOWELL,

Be it Ordained, by the City Council of the City of Lowell, as follows:

That Section 12, of Chapter 5, of the Ordinances of the City of Lowell as amended by an ordinance passed to be ordained and approved January 3, 1890, is further amended by inserting after the words "Bridge Street," and before the word "provided" in said ordinance as amended, the following words "nor of any of the territory enclosed by the following boundary lines," to wit: "Beginning at the junction of the middle line of Hanover street with the middle line of Merrimack street, thence southerly along the middle line of Hanover and Lewis streets to the middle line of Broadway street, thence westerly along the middle line of Broadway street to the middle line of Suffolk street, thence northerly along the middle line of Suffolk street, to the middle line of Merrimack street, thence easterly along the middle line of Merrimack street to the point of beginning."

In Common Council, Nov. 10, 1891.

Passed to be ordained.

THOMAS J. SPARKS, President.

In Board of Aldermen, Nov. 17, 1891.

Passed to be ordained.

JEREMIAH CROWLEY, Chairman.

Approved Nov. 18, 1891.

GEORGE W. FIFIELD, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Ninety-one.

AN ORDINANCE AMENDING SECTION TWELVE OF CHAPTER FIVE
OF THE ORDINANCES OF THE CITY OF LOWELL.

Be it Ordained, by the City Council of the City of Lowell, as follows:

That Section twelve of Chapter Five of the Ordinances of the City of Lowell, be, and the same is hereby amended by inserting after the word "beginning" and before the word "provided" the words "nor on either side of Westford street from the westerly line of Grand street to the easterly line of Royal street, for a distance of fifty feet back from either line of Westford street.

In Board of Aldermen, Dec. 10, 1891.

Passed to be ordained.

JEREMIAH CROWLEY, Chairman.

In Common Council, Dec. 10, 1891.

Passed to be ordained.

THOMAS J. SPARKS, President.

Approved Dec. 11, 1891.

GEORGE W. FIFIELD, Mayor.

CITY OF LOWELL.

In the Year Eighteen Hundred and Ninety-two.

AN ORDINANCE RELATING TO CHAPTER TWENTY-EIGHT, SECTION
ONE OF THE REVISED ORDINANCES.

Be it Ordained, by the City Council of the City of Lowell, as follows:

Section One of Chapter Twenty-eight of the Revised Ordinances of the City of Lowell, is hereby ordained to read as follows :

SECTION 1. In the month of February, or March of the year Eighteen Hundred and Ninety-two and in every third year thereafter, there shall be chosen by concurrent vote of both branches of the City Council a Chief of Police, who shall hold his office for the term of three years from the first Monday of January following his election or until his successor is chosen or he is removed for cause by the City Council by concurrent vote: And should a vacancy occur from any cause in said office during said term a successor shall be elected in like manner as above provided, who shall hold his office for the remainder of the unexpired term.

This Ordinance shall take effect upon its passage and Section One of Chapter Twenty-eight of the Revised Ordinances of the City of Lowell, is hereby repealed.

In Common Council, Feb. 9, 1892.

Passed to be ordained.

THOMAS J. SPARKS, President.

In Board of Aldermen, Feb. 9, 1892.

Passed to be ordained.

A. A. HAGGETT, Chairman.

Approved Feb. 9, 1892.

GEORGE W. FIFIELD, Mayor.

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SIXTY-SIXTH
ANNUAL REPORT
OF THE
SCHOOL COMMITTEE
OF LOWELL, MASS.,

TOGETHER WITH THE
TWENTY-EIGHTH ANNUAL REPORT
OF THE
SUPERINTENDENT OF PUBLIC SCHOOLS,
REPORTS OF EVENING SCHOOLS AND MUSIC,
AND AN APPENDIX.

1891.



LOWELL, MASS.,
VOX POPULI PRESS: S. W. HUSE & CO.
1892.

ORGANIZATION
OF THE
SCHOOL COMMITTEE,
1891.

GEORGE W. FIFIELD, Chairman.
WALTER COBURN, Vice Chairman.
GEORGE F. LAWTON, Secretary.

MEMBERS OF THE SCHOOL COMMITTEE.

GEORGE W. FIFIELD, Mayor	.	.	.	.	.	.	} <i>Ex Officiis</i>
THOMAS J. SPARKS, President of Common Council	.	.	.	.	.	.
Ward 1—LAWRENCE CUMMINGS	.	.	.	.	.	Term Expires 1891	
PATRICK KEYES, JR.	.	.	.	.	.	" "	1892
" 2—GREENLEAF C. BROCK	.	.	.	.	.	" "	1891
WILLIAM H. LATHROP	.	.	.	.	.	" "	1892
" 3—GEORGE M. HARRIGAN	.	.	.	.	.	" "	1891
JOHN W. McEVOY	.	.	.	.	.	" "	1892
" 4—FRED WOODIES	.	.	.	.	.	" "	1891
RANSOM A. GREENE	.	.	.	.	.	" "	1892
" 5—WALTER COBURN	.	.	.	.	.	" "	1891
ANDREW G. SWAPP	.	.	.	.	.	" "	1892
" 6—LEONARD HUNTRESS	.	.	.	.	.	" "	1891
ALMON W. HILL	.	.	.	.	.	" "	1892

STANDING COMMITTEES.

- ON ACCOUNTS—The Mayor, Messrs. Woodies, Harrigan, Swapp, Keyes.
- ON SCHOOL-HOUSES AND HYGIENE—Messrs. Cummings, McEvoy, Huntress, Hill, Lathrop.
- ON TEACHERS AND TRAINING SCHOOL—Messrs. Brock, Greene, Coburn, Harrigan, Huntress.
- ON REPORTS AND PRINTING—Messrs. McEvoy, Huntress, Brock, Greene, Lathrop.
- ON BOOKS AND SUPPLIES—Messrs. Swapp, Woodies, Harrigan, Hill, McEvoy, Lathrop.
- ON SALARIES—The Mayor, Messrs. Brock, Cummings, Coburn, Keyes.
- ON PENMANSHIP AND DRAWING—Messrs. Woodies, Coburn, McEvoy, Hill, Keyes.
- ON MUSIC—Messrs. Harrigan, Swapp, Greene, Lathrop, Cummings.
- ON EVENING SCHOOLS—Messrs. Greene, Cummings, Swapp, Hill, Keyes.
- ON RULES AND REGULATIONS—Messrs. Coburn, Woodies, Swapp, Harrigan, McEvoy.
- ON MILITARY INSTRUCTION—Messrs. Hill, Coburn, Cummings, Keyes, Lathrop.
- ON PRIVATE SCHOOLS—The Mayor, Messrs. Brock, McEvoy, Keyes, Huntress.
- ON SEWING—Messrs. Keyes, Woodies, Harrigan, Huntress, Greene.

ASSIGNMENT OF SCHOOLS.

- THE MAYOR—Reform School.
- MR. SPARKS—Reform, Middlesex Village.
- MR. CUMMINGS—High, Green, Morrill.
- MR. KEYES—High, Reform, Cottage Street, Chapel, Cheever Street, Worthen Street.
- DR. LATHROP—Kirk Street, West Sixth Street, Tenth Street, River Street.
- MR. BROCK—High, Varnum, Fourth Street.
- MR. HARRIGAN—High, Butler, Agawam Street, Lyon Street.
- MR. MCEVOY—London Street, Carter Street, Ames Street, Weed Street.
- MR. WOODIES—Highland, Franklin, Howard Street, Grand Street.
- MR. GREENE—High, Edson, Eliot, Dover Street.
- MR. COBURN—High, Pawtucket, Mammoth Road, Cross Street, Plain Street, Varnum Avenue.
- MR. SWAPP—High, Bartlett, Cabot Street, School Street.
- DR. HUNTRESS—Colburn, High Street, Pond Street.
- DR. HILL—High, Moody, Fayette Street, Charles Street, Central Street.
- HIGH SCHOOL—Messrs. Coburn, Cummings, Keyes, Brock, Harrigan, Greene, Swapp, Hill.

GEORGE F. LAWTON, Superintendent of Public Schools.

Office in City Government Building.

OFFICE HOURS: One hour after the forenoon session of the schools, and
from 2 to 3 o'clock on Saturday afternoons.

JOHN A. SMITH, Supervisor of Evening Schools.

TRUANT COMMISSIONERS.

BICKFORD LANG. JAMES KELLY. JOHN F. WILLIAMS.

Office in City Government Building.

ORGANIZATION
OF THE
SCHOOL COMMITTEE,
1892.

GEORGE W. FIFIELD, Chairman.
GEORGE M. HARRIGAN, Vice-Chairman.
ARTHUR K. WHITCOMB, Secretary.

MEMBERS OF THE SCHOOL COMMITTEE.

GEORGE W. FIFIELD, Mayor	.	.	.	.	.	.	} <i>Ex-Officiis</i>
THOMAS J. SPARKS, President of Common Council	.	.	.	.	.	.
Ward 1—PATRICK KEYES, JR.	.	.	.	.	.	Term Expires	1892
LAWRENCE CUMMINGS	.	.	.	.	.	"	1893
" 2—WILLIAM H. LATHROP	.	.	.	.	.	"	1892
FREDERICK T. WALSH	.	.	.	.	.	"	1893
" 3—EDWARD GALLAGHER	.	.	.	.	.	"	1892
GEORGE M. HARRIGAN	.	.	.	.	.	"	1893
" 4—RANSOM A. GREENE	.	.	.	.	.	"	1892
FRED WOODIES	.	.	.	.	.	"	1893
" 5—ANDREW G. SWAPP	.	.	.	.	.	"	1892
WALTER COBURN	.	.	.	.	.	"	1893
" 6—ALMON W. HILL	.	.	.	.	.	"	1892
THOMAS P. BOULGER	.	.	.	.	.	"	1893

STANDING COMMITTEES.

- ON ACCOUNTS—The Mayor, Messrs. Woodies, Harrigan, Walsh, Boulger.
- ON SCHOOL-HOUSES AND HYGIENE—Messrs. Cummings, Hill, Gallagher, Lathrop, Boulger.
- ON TEACHERS AND TRAINING SCHOOL—Messrs. Swapp, Greene, Harrigan, Coburn, Keyes.
- ON REPORTS AND PRINTING—Messrs. Lathrop, Greene, Gallagher, Walsh, Boulger.
- ON BOOKS AND SUPPLIES—Messrs. Harrigan, Woodies, Keyes, Hill, Boulger, Lathrop.
- ON SALARIES—The Mayor, Messrs. Cummings, Greene, Coburn, Walsh
- ON PENMANSHIP AND DRAWING—Messrs. Woodies, Cummings, Hill, Gallagher, Walsh.
- ON MUSIC—Messrs. Keyes, Woodies, Greene, Harrigan, Boulger.
- ON EVENING SCHOOLS—Messrs. Greene, Cummings, Swapp, Hill, Keyes.
- ON RULES AND REGULATIONS—Messrs. Coburn, Keyes, Swapp, Cummings, Walsh.
- ON MILITARY INSTRUCTION—Messrs. Hill, Coburn, Gallagher, Harrigan, Lathrop.
- ON PRIVATE SCHOOLS—The Mayor, Messrs. Swapp, Gallagher, Lathrop, Walsh.
- ON SEWING—Messrs. Gallagher, Keyes, Harrigan, Coburn, Woodies.

ASSIGNMENT OF SCHOOLS.

- THE MAYOR—Reform School.
- MR. SPARKS—Reform, Middlesex Village, Ames Street.
- MR. KEYES—High, Reform, Worthen Street, Cheever Street.
- MR. CUMMINGS—High, Greene, Morrill.
- MR. LATHROP—Varnum, Fourth Street.
- MR. WALSH—Kirk Street, West Sixth Street, Tenth Street, Lakeview Avenue.
- MR. GALLAGHER—London Street, Weed Street, Cottage Street, Chapel Street.
- MR. HARRIGAN—High, Butler, Agawam Street, Lyon Street.
- MR. GREENE—High, Edson, Eliot, Dover Street, Powell Street.
- MR. WOODIES—Highland, Franklin, Howard Street, Grand Street.
- MR. SWAPP—High, Bartlett, Cabot Street, School Street.
- MR. COBURN—High, Pawtucket, Mammoth Road, Cross Street, Plain Street, Varnum Avenue.
- MR. HILL—High, Moody, Charles Street, Central Street.
- MR. BOULGER—High, Pond Street, High Street, Carter Street, Fayette Street, Sycamore Street.
- HIGH SCHOOL—Messrs. Coburn, Keyes, Cummings, Harrigan, Greene, Swapp, Hill, Boulger.

A. K. WHITCOMB, Superintendent of Public Schools.

Office in City Government Building.

OFFICE HOURS: One hour after the forenoon session of the schools, and
from 2 to 3 o'clock Saturday afternoons.

JOHN A. SMITH, Supervisor of Evening Schools.

TRUANT COMMISSIONERS.

BICKFORD LANG. JAMES KELLY. JOHN F. WILLIAMS.

Office in City Government Building.

REPORTS.

REPORT OF THE SCHOOL COMMITTEE.

The very comprehensive report of the Superintendent of Schools is so complete with regard to the work of the past year, that there is very little that need be said here.

In accordance, however, with a custom long observed in this city, a few words of introduction from members of the Committee seem to be called for.

The School Committee, coming as they do from the various walks of life, and looking upon the school work from the standpoint of the citizen rather than the professional educator, might be supposed to derive impressions of the work that would be somewhat different from those that would be suggested to the teachers themselves. These impressions, however, in regard to the schools of this city, are not uncomplimentary either to the

system or to those that administer it. The efficiency of the schools, and the capability and faithfulness of the teachers, is suggested at once to the observer who, for the first time, inspects these institutions.

Especially are we so impressed if we compare the schools of to-day with those of past years. There is no room for doubt that the schools are steadily improving, and that the opportunities and advantages of the pupils are constantly enhanced.

The introduction of the Training School, thus making a more impartial and more judicious assignment of teachers, is alluded to in the Report of the Superintendent. While this school may not yet have reached its highest efficiency, or have adopted the most perfect methods, we are confident that it will grow steadily in public favor, and prove itself indispensable as a part of the system of schools.

The distribution of supplementary reading among the schools is of great advantage to the pupils, in giving them a knowledge of the best authors, and in giving them a taste for good books. There has been a desire on the part of the Committee that as much supplementary reading should be furnished to the schools as they could profitably use. The

schools are indebted to the City Library also for many favors in this direction, the teachers being allowed great freedom in the use of the books of the library. The scholars appreciate good reading, and remember it much better than many persons are inclined to think

Another change which has been proposed to the Committee and has received some consideration, is the introduction of manual training in the High School. Its introduction is in every way desirable; but while there may be no doubt of the utility and practicability of this form of education, and while the results obtained may be eminently satisfactory in places where manual training is taught; still, as the introduction of this form of study is costly, the Committee will hesitate before they expend much money in this way.

Some of the cities where manual training has been most successful have been aided in the introduction of the work by munificent gifts from private citizens. Perhaps it is not too much to hope that in *this* city, where there is so much wealth and where industrial achievements have been so remarkable, we may have some citizen who will give a sum of money sufficient to inaugurate this improvement.

The man who should do this would not only honor his own name but he would confer an inestimable blessing upon the young men who rely upon the city to give them the ground-work of their education.

WM. H. LATHROP,

G. C. BROCK,

R. A. GREENE,

LEONARD HUNTRESS,

Committee on Reports and Printing.

REPORT OF EVENING SCHOOLS.

TO THE SCHOOL COMMITTEE:

Gentlemen,—In presenting this report of the Evening schools for the year ending Dec. 31, 1891, it gives me pleasure to state that so far the work done, particularly in the High school, has been very gratifying. We do not think that an extended report is necessary, from the fact that the press of our city has kept the public informed of what is being done in these schools to aid the young men and young women who wish to secure an education, after a day of toil.

ELEMENTARY SCHOOLS.

We have at present ten Elementary schools in operation, being an increase of one during the year. The attendance has increased over that of former years, more particularly in the Franklin and Green school districts, the numbers at these schools being such that overflow schools were opened in the Edson and Morrill school buildings. During a portion of the term the attendance was decreased somewhat by sickness, caused by the prevailing epidemic.

HIGH SCHOOL.

During the past year the Evening High school has maintained its standard of excellence; the teachers, as a rule, are devoted to the interests of the pupils, and the enthusiasm thus engendered makes the work both agreeable and profitable to teachers and pupils alike. The discipline of the school is ex-

cellent; the pupils are so busy and interested in their studies that there is but little time for play.

The school is under the supervision of Mr. Frank S. Clark as principal, who has shown marked devotion to the work, while his methods of conducting the school have had a strong influence on both teachers and scholars. All seem to be working for the common good.

A course of study is now in preparation, covering three years' work in the school; it will go into effect at the beginning of the next term. Such a course of study will, we trust, lead to the introduction of a definite plan for one in the elementary schools.

The following named persons have been graduated from the school the past three years.

GRADUATING CLASS OF 1889.

Oscar Ellmore Warren.

John Joseph Lowe.

Timothy James Navin.

John Thomas Noble.

Bernard Miles Reilly.

William Francis Clark.

Clarence Lees.

Maggie Violet Hart.

Maggie Mary Barry.

Agnes Teresa Owens.

Katie Agnes Fitzgerald.

James Andrew Maguire.

GRADUATING CLASS OF 1890.

John Francis Callahan.

James Coughlin.

James Donnelly.

William Henry Gallagher.

James Joseph Hassett.

William Henry Healey.

George Stewart Howard.

John Joseph McKeon.

Thomas Francis Morrissey.

Daniel Joseph Murphy.

Mary Ella Gallagher.

Minnie Frances Horan.

Lilla Jane Jackson.

Marietta McGrade.

Mary Teresa Morris.

Katie Agnes Navin.

Mary Agnes O'Brien.

Helen Hendry Thomson.

GRADUATING CLASS OF 1891.

James Joseph McLaughlin.
Martin Edward Duffy.
Charles Albert Harrington.
Michael Francis Lyons.
Michael Thomas McGlynn.
James McGlynn.
James Michael McGreery.
Daniel Patrick McKenna.
Michael Joseph Murphy, Jr.
Michael Henry Reilly.
Patrick Francis Riley.

John Shalvey.
Thomas Augustine Sullivan.
Daniel Joseph Sullivan.
Mary Agnes Cooney.
Gertrude Elizabeth Ginty.
Blanche Louise Goodwin.
Margaret Louise Hickey.
Annie Marie James.
Katharine Norris.
Mary Jane O'Hare.

Our ambition was, and is, to make the evening schools of our city take the first rank; that they should be second to none, either in the State or Nation. With the results already achieved we have cause to be satisfied, but we must not let the work done in the past satisfy us, but endeavor to make the schools still better in the years to come. In former reports we called your attention to some of the conditions that weigh them down and bar their progress to a great extent, one of which, in our opinion, is the placing of young ladies in the schools as teachers, who are inexperienced, and by reason of this inexperience are unfitted to do the work required to obtain the best results with this class of pupils. We would recommend that some action be taken that will result in securing better instructors.

My sincere thanks are due to the Superintendent of Schools, to the School Committee, also to the agents and overseers in the several manufacturing establishments in our city, for favors we received at their hands.

The following summary gives the attendance for the term of 1890-91, also cost of maintaining evening schools for the year 1891.

SUMMARY FOR THE TERM OF 1890-91.

SCHOOLS	Number of Teachers at beginning of term.	Number of Teachers at close of term.	Evenings taught.	Whole number of pupils on time book during term.			Average number of pupils belonging to the school.			Average attendance.			Per cent. of attendance.
				Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	
High,	17	15	73	418	314	732	206	145	351	167	132	299	.86
Aiken,	6	4	63	96	51	147	45	33	78	43	27	70	.97
Bartlett,	17	16	73		431	431		270	270		258	258	.83
Butler,	9	6	73	187	20	207	132	17	149	88	16	104	.70
Colburn,	10	5	73	202	98	300	84	41	125	62	31	93	.74
Franklin	12	8	73	192	128	320	76	59	135	67	48	115	.80
Green,	25	21	73	856		856	408		408	367		367	.90
Moody,	10	7	74	137	116	253	71	64	135	58	50	108	.80
Varnum,	6	4	73	134	39	173	71	31	102	65	15	80	.78
Worthen	6	6	74		272	272		107	107		84	84	.88
	108	92		2222	1469	3691	1093	767	1860	917	661	1578	.84

EXPENSES FOR THE YEAR 1891.

Paid to Teachers	\$12,573 00
to Janitors	1,470 35
for Lighting	1,110 85
for Incidentals	341 41
	<hr/>
	\$15,495 61

Respectfully submitted,

JOHN A. SMITH,

Supervisor.

REPORT ON MUSIC.

TO THE SCHOOL COMMITTEE:

During the past two years a very material change has been made in the method of teaching music in the primary schools of the city, brought about, after a long and exhaustive discussion and investigation, by the introduction and substitution, in that department, of the Normal system in place of the National, which had been in use for many years. This change was made in the fall of 1889, and the special instructor has been pleased with the results accomplished.

The differences in the methods of instruction, if we are to judge by the statements of the learned gentlemen who represented the two systems, are many and varied, but are in the main technical in character. Results are most desired by the parents, and we are endeavoring to obtain those results in the best possible manner, in the short space of time allotted to us in the school curriculum.

Music, to the vast majority of the pupils, is a natural accomplishment, and hence, if properly presented, an agreeable and interesting study; this essential we believe the Lowell schools possess.

In the person of Mr. Owen, the Supervisor, we have an energetic and capable gentleman, who is enthusiastic in his profession, and his efforts are ably seconded by the regular teachers who, in the main, are interested and devoted to this branch of work. We believe that the work to-day will compare favorably with any previously accomplished in the city.

Owing to the change of High school, and the consequent use of the Green school hall by the drawing school, the regular instruction to the pupils of the High school was discontinued this year.

It is a matter of regret that every grammar building is not provided with a suitable hall where the school could assemble at least once each day and devote a short time to music and other studies ; the results would be beneficial in many respects, and while this is not directly within the province of this committee, yet we see and feel the necessity for it and urgently bring it to the attention of the Board.

Respectfully submitted,

GEO. M. HARRIGAN.
LAWRENCE CUMMINGS.
ANDREW G. SWAPP.
WM. H. LATHROP.
RANSOM A. GREENE.

REPORT OF THE SUPERINTENDENT.

OFFICE OF THE SUPERINTENDENT OF SCHOOLS,
Dec. 31, 1891.

Gentlemen of the School Committee:

In accordance with your rules, I have the honor to submit the following report for the year 1891 :

SUMMARY OF STATISTICS.

Value of real and personal property	\$64,088,275
Population (1890)	77,696
Number of polls.	21,018
Increase for the year	990
Number of children in the city between five and fifteen years of age, May 1, 1891	12,749
Ward One, 1,490; Ward Two, 2,102; Ward Three, 2,754; Ward Four, 1,804; Ward Five, 3,115; Ward Six, 1,484.	
Number of public schools	45
One High, nine Grammar, one Training, three Mixed, thirty-one Primaries.	
Number of public school buildings	46
Number of teachers employed December, 1891,	210
Increase for the year	1
High school, three males, thirteen females.	
Grammar schools, eight males, seventy-seven females.	
Mixed schools, two females.	
Primaries, ninety-five females; Training, six females	101
Number of pupil teachers in Training school	46
One teacher of penmanship.	
One teacher of drawing.	
One teacher of music.	
One teacher of sewing.	
One teacher of physical culture.	
One military instructor.	
Number of teachers of Evening schools employed during term of 1890-91	104
Whole number enrolled in the Evening schools for term of 1890-91	3,691

Whole number enrolled in the Day schools	11,644
Average number belonging to all the Day schools	8,168
High, 465; Grammar, 3,390; Training and Primary, 4,152; Mixed, 61.	
Average attendance in all the schools	7,328
High, 441; Grammar, 3,084; Training and Primary, 3,750; Mixed, 53.	
Average number belonging to each teacher	40.8
High, 29.1; Grammar, 39; Training and Primary, 42; Mixed, 20.1.	
Average number belonging to each room	40.8
High, 29.1; Grammar, 39; Training and Primary, 42; Mixed, 20.1.	
Average per cent. of attendance	90
High, .95; Grammar, .91; Training and Primary, .90; Mixed, .86.	
Average cost of each pupil, for tuition only, based on average number belonging	\$17.80
High, \$32.21; Grammar, \$17.84; Training and Primary, \$13.50; Mixed, \$21.42.	

RECEIPTS AND EXPENDITURES.

RECEIPTS.

Balance undrawn Jan. 1, 1891	
Appropriated and assessed	\$160,000 00
Received from loan	40,000 00
Received from other sources	919 23
	<hr/>
Total standing to credit of schools	\$200,919 23
	<hr/>

EXPENDITURES

Paid to the teachers of Day schools:	
High school	\$14,978 75
Grammar schools—Bartlett	\$6,606 99
Butler	7,813 64
Colburn	2,232 03
Edson	7,808 73
Green	7,415 00
Highland	9,801 91
Moody,	6,572 39
Pawtucket	4,171 12
Varnum	8,083 76
	<hr/>
	60,505 57
	<hr/>
Amount carried forward	\$75,484 32

<i>Amount brought forward</i>		\$75,484 32
Paid to the teachers of Day schools (continued):		
Primary and Mixed schools,		57,193 75
Training school		8,054 01
Teacher of penmanship		1,250 00
Teacher of drawing		1,250 00
Teacher of music		1,250 00
Military instructor		237 50
Teacher of sewing		740 00
Total paid for instruction in Day schools, inclusive of instruction in military tactics in High school		\$145,459 58
Paid for Evening schools:		
To teachers	\$12,573 00	
Janitors	1,470 35	
Lighting	1,110 85	
Incidentals	341 41	15,495 61
Evening Drawing schools:		
To teachers	\$4,277 50	
Janitors	146 00	
Lighting	408 53	
Incidentals	233 86	5,065 89
Fuel		10,522 86
Bills of Superintendent of Public Streets for hauling coal		112 70
Bills of Water Board for water		1,540 51
General repairs, material, labor, etc.		210 60
Bills of Superintendent of Public Buildings, for lumber, making and repairing furniture, labor and new furniture		1,068 76
Distributing 10,000 school reports		47 50
Text books		4,224 01
Supplementary reading		265 45
Drawing books, writing books, slates, pens, ink, paper, etc.		3,367 97
Incidentals on account of same		114 15
Material for Training school		101 10
Books, charts, etc., for general use		126 34
Mr. Bickford Lang, for use of team to deliver books, etc.		75 00
High school battalion		328 12
High school graduating exercises		102 20
Rebinding school books		68 25
Taking census of school children		758 20
Rent of telephones		109 96
Piano for Training school		350 00
<i>Amount carried forward</i>		\$189,514 76

<i>Amount brought forward.</i>	\$189,514 76
Horse, wagon and harness	427 35
Book covers	264 78
Power for ventilating purposes	225 00
Teaming	74 50
Sewing material	232 07
Rent of temporary rooms for school purposes	770 00
Lowell Gas Light Company, for gas for day schools	253 78
Supplies for janitors	605 05
Salary of Superintendent	2,600 00
Salary of Supervisor of Evening schools	1,350 00
Salary of Truant Commissioners	2,549 97
Miscellaneous	1,161 01
Total expenditures	\$200,028 27
Balance undrawn	890 96
Total	\$200,919 23

SCHOOL-HOUSES

RECEIPTS.

Balance undrawn Jan. 1, 1891,	
Appropriated and assessed	\$25,000 00
Loan	79,000 00
Transferred from reserved fund	601 03
Received from other sources	2,507 91
Loan (Moody school)	60,000 00
	\$107,108 94
Loan (New High school building)	150,000 00

EXPENDITURES.

For temporary High school	\$ 6,612 54
For Moody school	22,134 72
Janitors	17,211 71
General repairs	23,284 69
Total expenditures	\$69,243 66
Balance undrawn (Moody school)	37,865 28
Total	\$107,108 94

NEW HIGH SCHOOL BUILDING EXPENDITURES.

Plans, land, and foundation	\$ 38,867 65
Balance undrawn	111,132 35
Total	\$150,000 00

The total expenditure of the school department, as shown in the foregoing exhibit, is \$200,028.27, a large sum it is true, but only a slight increase over last year and no larger than was to be expected. In several previous reports from this office it has been shown conclusively that the expenses of this department have not increased as fast as those of the other departments of the city government, that a less proportion of the tax levy is devoted to school purposes now than twenty or forty years ago, although free text books, evening schools, and of late improved and costly methods of ventilating school buildings have been added to swell the expense. And finally it has been shown that our expenses are less proportionally than those of the majority of the other cities of the state. To this I wish to add that the large expenditure is in spite of the most scrupling economy. The free text books are patched and mended by teachers till they are made to last more than twice as long as the same books used to do when owned by the pupils. The Committee on Books and Supplies hesitates long over the question of a few dollars' worth of Kindergarten material for "busy work" for primary children, or a Century Dictionary for the High School. A teacher's request for a book-case—sorely needed beyond a doubt—is refused by the Superintendent because, if granted, it may be seized upon as a precedent by others, and the expense of a book case for every school-room would be too great to be considered. The worthy gentlemen who serve the city as janitors are kept in a continual state of suppressed indignation, and sometimes it is not all suppressed either, because they are called sharply to account if a duster even fails to last as long as it ought to do. So far from being extravagant, I believe we carry our parsimony too far. I have found teachers using school books, for instance, which were utterly unfit for further service, and which cleanly children, or any children for that matter, might well object to handling. I believe that the citizens of Lowell would wish us to be more rather than less generous in these respects. The expenses for 1892 will inevitably be a little greater than in 1891, and they ought in all reason to be considerably greater. Every dollar of an appro-

priation of \$220,000 could and would be wisely and judiciously expended.

The statistics with regard to school attendance show that there has been a slight falling off in the average number belonging, which has been 8,165 in 1891, as against 8,226 in 1890. This is a great surprise to me, and I am able to offer no satisfactory explanation. The decrease is not confined to any one section, being shared by twenty-seven schools out of forty-five. It does not appear to be due to transfers to Parochial schools, for that Grammar school which has made the largest gain is the one most completely surrounded by these schools, and some of the heaviest losses have been in sections which have not been affected in this way at all. The per cent. of attendance shows a slight improvement, though it is less than one per cent. and so does not appear in the tables at all.

SCHOOL-HOUSES.

No new school-houses were begun in 1890, and none have been finished in 1891. The heavy expense to be incurred in building a new High school-house next year has been considered a sufficient excuse for doing nothing this year. In the meantime the city's needs are increasing every day, and the building of several new school-houses is already a matter of pressing necessity. Of these, the one most needed is a Grammar school building somewhere near the line between Wards Three and Four. While the city is growing rapidly in all directions, its most rapid extension is towards the South and West. The Butler school has two classes in its hall, the Highland one in its store-room, and two in the old Franklin school-house, and the Edson one in its third story. Of the Primaries of this section, the Powell street Primary is very full, and the Plain street Primary has an overflow class in the vestry of the church opposite the school-house. Now it so happens that the city owns a good building lot on Chelmsford street, at a point almost exactly equidistant from all these schools, and a building at this point would be a relief to all. It should be an eight-room brick building, with opportunity for a four-room addition,

which is certain to be needed before many years. At first two of its rooms should be used for primary grades, and if the building could be ready for occupancy next September, the other six would all be used for grammar-school purposes. If we begin such a building in 1892, we shall hardly get it ready for use before September of 1893, and the need of beginning at once is obvious. Such a building would relieve the Plain street Primary for the present, but eventually that two-room building must be doubled in size. At Sycamore street the school is now located in a private house which the city rents for the purpose. It is not well adapted to its present use, and the rapidly growing section of the city in which it is located will justly demand a new house at an early date. In Centralville both of the Primary schools below Bridge street are large enough to require the permanent employment of an extra assistant teacher, while east of Bridge street a full school is now forced to put up with quarters over the engine-house on Fourth street. If the Tenth street school could be relieved of the scholars now in it who come from west of Bridge street, and north of Thirteenth street, it could easily accommodate the Fourth street overflow, and the pressing need is, therefore, for a new school-house far enough out on Hildreth street to take the scholars who are now forced to go an unreasonable distance to Tenth street, and at the same time relieve both the West Sixth street and the Lakeview avenue schools. If such a four-room building were ready for occupancy we could fill three of its rooms next September. An addition to the Butler school, already recommended by the committee on education of the Common Council, might, perhaps, be deferred a year or two if a new Grammar school should be built on Chelmsford street, as suggested above, but will soon be needed in any case, and is a matter of the most pressing need if the manner of relieving it by a new building is not adopted at once. Several of the old buildings, which are still in usable condition, or at least are still in use, ought also to be replaced by better ones just as soon as possible, so it will be seen that there is work enough in this line to call for as large an appropriation as we can possibly

get. The old High school building, after a half century of usefulness, was taken down as soon as the school closed last summer, and the foundations are now all in place for the new building, which ought to be erected and in condition to occupy by Jan. 1, 1893. To accommodate the pupils of the High school a temporary addition has been made to the old Mann school, which is a good deal more useful than ornamental. Though cheap, and far from handsome, it answers its purpose well, and the scholars are, probably, fully as comfortable there as they would have been in the old building.

The foundations for the new Moody school are also finished, and if there is no further delay the new building ought to be ready for use next September. And the condition of the old building is such that any delay in completing the new one will be inexcusable.

To accommodate the overflow from the London street school, which found temporary quarters, during the warm weather, in a polling booth on Lincoln street, the old Rock street school-house was moved in November last to rented land in Ayer's City, west of the Framingham and Lowell railroad. The scholars who occupy one of its two rooms are still a part of the London street school, but as soon as a permanent abiding-place can be found for the Rock street house, which must eventually be done at or near its present location, the pupils in it should form a separate school. The old school-house is very far from being such as the city would have erected if there had been time (and money and the disposition) to build a new one, but under the circumstances its removal to its present quarters was probably the best thing possible.

No extensive repairs have been made in any of the school-houses this year, but several houses have been re-painted, and many minor matters were attended to during the summer vacation, and the condition of the city's school-houses, as a whole, is probably as good as it has ever been, though still far from being as good as it ought to be. The systems of ventilation which were introduced last year into the Edson and Franklin school-houses have given great satisfaction, and these old build-

ings are to-day much better ventilated than some of the newer ones which parents and pupils prefer on account of their finer appearance.

SCHOOLS.

A noted educator who had been invited to deliver an address, recently, upon "The Average School," explained his failure to speak upon the topic, by showing that there were no "average" schools, every school report he could find asserting that the schools of its own district, though not perfect, were "much above the average." And if this encomium is the right of all, certainly the schools of Lowell deserve no less.

Leaving out, however, the usual comparisons, which are proverbially odious, it is but justice to say that our schools, as a whole, are in good condition, and are doing an excellent work. No class in the community is more earnest and faithful than are our teachers, and to decry the results of their labors is to impugn their good sense and the good judgment of those by whom they have been appointed. I have found the schools, for the most part, in the short time since I have had the privilege of visiting them, in better condition than I had expected, and although I have but a small basis for any comparison with the past I am still quite sure that a considerable improvement has been made in the last few years. The one discouraging feature, however, is that improvement is not uniform. It seems to take only in spots. And the problem of the hour is how to secure uniformity, not by putting limitations upon all, but by raising the grade of those who are below the average to the standard of the best.

HIGH SCHOOL.

There has been no change in the corps of teachers at the High school, and except for its change of location the year would have been uneventful. A class of seventy-five, over 16 per cent. of the average number belonging, graduated in June. In September the school was moved to temporary quarters, a part in the old Mann school and the annex thereto, and a part

in the third story of the Worthen street school. Though far from being all that could be desired these quarters are undoubtedly the best attainable, and teachers and pupils are cheerfully making the best of the situation, and doing work fully up to the school's usual high average.

I suggest that a thorough commercial course, equal to that of the best commercial colleges, be made a part of the work of our High school. I know that there is a strong prejudice against schools of this sort, a general feeling that they "don't amount to much," but this is, I think, largely due to the many cheap imitations which abound rather than to the failure of the best schools to do good work and produce valuable results. It has been my fortune to have, at different times, two room-mates who were students in the commercial school of which Prof. Meservey, the author of the text book now in use in Lowell schools, was the head, and I know that these young men, and their fellow students, received a training of the most thorough and systematic kind. Their enthusiasm was not equalled by that of any other class of students with whom I have ever been associated, and I am sure that the results were of the greatest practical value. And Lowell should have a school just as good, or none at all. Such a course would, I believe, be a boon, not only to a large number of the pupils already in the High school, but would attract to it a hundred others who now fail to go there for the lack of just such an opportunity. I refer to this at this time in order that, if it should receive favorable consideration, some slight changes should be made in the plans for our new High school building for the accommodation of the pupils of this course, mainly in providing one room considerably larger than the rest, capable of seating seventy-five or one hundred pupils, which room would be very useful for many other purposes in any case. Of course such a school would need a post-office, bank, telegraph office, etc., but the whole extra expense would be very small indeed.

The School Committee has already asked the Committee on Lands and Buildings to provide in the basement of the new High school building suitable accommodations for classes in

manual training. The matter should not be allowed to rest with a request merely, but should be pushed to a successful realization of the wishes of the Committee.

In accordance with what I find to have been the custom in the past I give herewith the programme of the graduating exercises, in June, and the names of the graduates and of the Carney medal scholars :

PROGRAMME.

1. MARCH. "On Guard" *Wiegand*
GERMANIA ORCHESTRA.
2. OVERTURE. "Striadella" *Flotow*
ORCHESTRA.
3. THE MOB AT ALTON.
WILLIAM N. SHAW.
4. WONDER AND BEAUTY ALL AROUND US . . . *Written by Josephine S. Battles*
BERTHA A. STILES.
5. MUSIC. "Voice of the Western Wind" *Barnby*
6. NORTH AMERICAN INDIANS *Written by Margaret E. Nixon*
ALICE F. SEETON.
7. PHILLIPS IN FANEUIL HALL.
TIMOTHY J. HALLORAN.
8. ANCIENT MANNERS AND CUSTOMS . . . *Written by Florence M. Geer*
HELEN M. OSGOOD.
9. MUSIC. "Sing on, Sweet Bird" *W. E. Owen*
10. CASKET OF JEWELS.
Diamond } *Written by Irma V. Hodgman*
Emerald }
Ruby } *Written by Mabel H. Adams*
Pearl }
- CLARE S. REED, LILLA B. COURT, MARY A. MULLEN,
IRENE G. HARTWELL.
11. EULOGY ON BURNS.
SIMON F. COX.
12. CLUBS AND SOCIETIES *Written by Ida A. Trueworthy*
IDA A. TRUEWORTHY.
13. MUSIC. Concert Waltz. "Louise" *W. E. Owen*
ORCHESTRA.
14. SAFEGUARDS OF THE NATION.
ELMER A. BAIRD.

15. IN THE DARK *J. W. Riley*
 EMMA M. BARTLETT.
16. MUSIC. { (a) "In May Time" *Emerson*
 { (b) "Fisher's Song" *Veazie*
17. VALEDICTORY.
 CHARLES OTIS ALLEN.
18. PRESENTATION OF CARNEY MEDALS.
 BY REV. R. A. GREENE.
19. PRESENTATION OF DIPLOMAS.
 BY SUPT. GEO. F. LAWTON.
20. SINGING OF CLASS ODE *W. E. Owen*
 Words by Clare S. Reed.

The closing hour draws near,	Not one familiar face
Soon must we part;	Miss we to-night,
Each waits without a fear,	Praise be to Heavenly Grace,
With trusting heart.	His sov'reign might.
Bright mem'ries of these days	Ne'er may we meet again,
Will rival Phœbus' rays,	Parting brings bitter pain,
Our song rings loud and clear,	Time speeds with rapid pace.
Farewell! Farewell!	Farewell! Farewell!

Firm may our purpose be,
 Now while we may,
 To live, O God, with Thee,
 From day to day,
 So, when Thy voice we hear
 Call us from friends so dear,
 Sorrow and pain will flee.
 Farewell! Farewell!

GRADUATES, 1891.

FOURTH YEAR.

- | | |
|---------------------------|-----------------------------|
| George Arthur Brothers. | Josephine Sawyer Battles. |
| Simon Francis Cox. | Helen Agnes Drury. |
| Charles Marshall Forrest. | Ellen Burrows Duckworth. |
| Louis Nathan Gilman. | Frances Charlotta Forsberg. |
| Timothy Joseph Halloran. | Ethel Hortense Geddes. |
| Boyden Harlin Pillsbury. | Alta Electa Hamilton. |
| William Nichols Shaw. | Irma Violet Hodgman. |
| Arthur Thurston. | Clare Sawyer Reed. |
| Mabel Harriet Adams. | Bertha Amelia Stiles. |
| Ethel Maria Bates. | Ida Amelia Trueworthy. |

THIRD YEAR.

Charles Otis Allen.	Alice Frances Seeton.
Arthur Stone Coburn.	Lillian Grey Stewart.
William John Flanagan.	Emma Maria Bartlett.
George Everett Holmes.	Lilla Blanche Court.
John James McMorrow.	Margaret Victoria Cuthbertson.
Edward Whitman Say.	Mary Ann Donoghue.
William Leonard Rogers.	Florence May Geer.
Elmer Ashton Baird.	Irene Greenleaf Hartwell.
Frederic William Coburn.	Marietta King.
Arthur Warren Floyd.	Gertrude Agnes Meloy.
Maurice Joseph Landers.	Ella Marie Florentine Olwell.
Thomas Francis Murphy.	Susan Josephine Pevey.
Frederick Dana Shepard.	Sarah Gertrude Sparks.
Walter Burnham.	Georgiana Russell Thomson.
William Henry Fox. •	Mary Jane Boyle.
David Andrew Mahoney.	Harriet Josephine Courtney.
Forest Howard Peabody.	Helen Cecelia Dempsey.
Eugene Francis Toomey.	Florence Eaton.
Mary Bancroft.	Helen Eugenia Gookin.
Katherine Louise Costello.	Carrie Grace Hill.
Bertha Jewett Davis.	Grace Gertrude Marren.
Esther Gertrude Donlan.	Mary Aloyesa Mullen.
Adaline Carmalede Garrahan.	Helen Mabel Osgood.
Millie Gertrude Gregg.	Gertrude Celestia Ring.
Mabel Veronica Hobbs.	Alice Clara Stackpole.
Mary Eleanor MacCue.	Emma Veronica Vining.
Margaret Elizabeth Nixon.	Fannie Isabelle Walley.
Cora Belle Parker.	

CARNEY MEDAL SCHOLARS, 1891.

Charles Otis Allen.	Mabel Harriet Adams.
Maurice Joseph Landers.	Irma Violet Hodgman.
George Arthur Brothers.	Josephine Sawyer Battles.

GRAMMAR AND PRIMARY SCHOOLS.

No new school has been established during the year, and no old one discontinued, though one, the Colburn, has been absorbed by the Training school, and will henceforth lose its distinctive name. It appears in the reports this year because it was in existence until June, but its name will probably be dropped in future reports. The school was an old one, which had done excellent work in its time, and probably never better work than in the last few years. Mr. Howe, the master of the

school for ten years, was elected master of the Varnum school in July last, a change which gave great satisfaction at the time, and which seems since to have been attended with the happiest results to all concerned.

Four "overflow" classes have been made permanent rooms by the transfer or election of regular teachers, as follows: one in the Cheever street Primary, one in the old Rock street school-house, as a part of the London street school, one in the Pawtucket school, and one in the Aiken avenue school-house, as the eleventh room of the Varnum school.

CHANGES IN THE ROLL OF TEACHERS.

DECEASED.

	Term of Service.
LUCRETIA A. DAY, High street school	27 Years.

RESIGNED.

ALICE M. SANBORN, Moody school	10	"
SUSAN M. ANDREWS, Edson school	27	"
MARY E. SMITH, Fayette street school	4	"
EMILY H. RADCLIFFE, Training school	2	"
GEORGE E. WORTHEN, Military Instructor	3	"
ANNIE M. BUCKMINSTER, Varnum avenue school	1	"

TRANSFERRED.

GEORGE W. HOWE, from the Colburn school to the Varnum school.
 MINNIE F. HILL, from the Cheever street school to the London street school.
 ALICE M. CLARKE, from the Highland school to the Training school, as second assistant.

ELECTED.

MABEL W. EWINGS, to the Training school, as third assistant.
 ALEXANDER GREIG, Jr., Military Instructor.
 DELIA J. SMITH, to the Varnum school.
 MARGARET J. KING, to the Charles street school.
 ALICE B. BESSE, to the Sycamore street school.
 AGNES T. COURTNEY, to the Lakeview avenue school.
 MARY E. MEEHAN, to the Cheever street school.
 MARY F. FOSS, to the Highland school.
 JENNIE FAY, to the Fayette street school.
 CARRIE A. PAUL, to the Training school.
 ELIZABETH WORTHLEY, to the High street school.
 HELEN M. SHEAN, to the Training school.
 BERTHA M. ROWLANDSON, to the Cheever street school.
 NELLIE F. DAVIDSON, to the Mammoth road school.

TRAINING SCHOOL.

The Training school has been a matter of such continual growth and change that a few words of history may not be inappropriate.

Previous to its establishment, candidates for the position of teacher in the Primary and Grammar schools were required to pass an examination which had always been so easy as to bar out only the very ignorant, and there would usually be a hundred or more "on the list" of those holding certificates of qualification to teach. From these, selections were made for substitute and temporary teachers on the judgment of the several sub-committees. Elections to permanent positions were made by the full board, but were usually no more than the indorsement of the choice of the sub-committee, who had the privilege of nomination. The new teachers were usually without experience, and capacity to teach, if possessed at all, could be developed only at the expense of their pupils, and while most teachers thus appointed were worthy, there was always a possibility that an unworthy one would slip in. The Training school, therefore, was established, primarily, to make tested merit the sole condition of appointment. It was to be, first of all, a "test" school. A second object was to do away with tyro work, and secure for all our schools a supply of experienced teachers. From this point of view it was to be a "practice" or "experience" school. And a third object, very important, though at first only incidental, was to instruct and train the candidates so that they might become able to do the best work in the shortest possible time. To this end it was to be a "training" school.

Early in 1888 the committee on teachers, of which Dr. Stephen J. Johnson was chairman, visited and inspected several training schools in other cities, and finally reported, May 28, 1888, in favor of the establishment of such a school in Lowell. July 2, 1888, they made a further report, which was adopted, that the four-room building known as the Worthen street school be devoted to training-school purposes, and be known as the Lowell Training school; that the corps of teachers consist of

a principal, an assistant, and twelve pupil-teachers, three to each room, the latter of whom should be required to teach in the Training school one and a half years before becoming eligible for election as regular teachers. It was further voted that the pupil-teachers should serve the first six months without pay, but should be paid the second six months, or term, at the rate of \$10 per month, and the third six months, or term, at the rate of \$15 per month, and that all substituting or temporary teaching in the Grammar and Primary schools should be done by members or graduates of the Training school, for which service they should receive, when employed, an additional compensation of \$1.25 per day. Twelve young ladies from the list of those already holding teachers' certificates were appointed sub-teachers for the school. August 31, a special examination was held for admission to the Training school, and as all the members of the three classes admitted without examination were employed as substitute teachers when the term opened in September, the first twelve of those who had passed the examination, Aug. 31, were admitted to the Training school. Mrs. Julia M. Dewey was elected principal of the school, Dec. 24, 1888, at a salary of \$1,200, and entered upon the discharge of her duties a few days later.

At a regular meeting of the Committee, Nov. 26, 1888, rules relating to the Training school were adopted, of which the following are the most essential :

RANK AND PROMOTIONS.

The Principal shall rank all the pupil-teachers of the school, and shall keep a record of their standing in:—

First—Recitations.

Second—Capacity for school government and discipline.

Third—Ability to teach.

An average rank for one term of less than fifty per cent. in any of the three departments of success shall be regarded as evidence that a pupil-teacher's continued membership in the school would be unprofitable, and she shall be deemed to have dissolved her connection with the school, which she may re-enter only with the unanimous consent of the Committee on Training school.

Regular promotions shall be made from class to class of pupil-teachers at the beginning of the September term of the public schools, and on the first Monday of February.

When a temporary or other vacancy occurs in the corps of teachers of the Grammar or Primary schools, it shall be filled by the member of the oldest or earliest class graduated from the Training school, who, at the term of her graduation, ranked highest of those of that class who reside in Lowell and continue to be applicants for teachers' positions.

In January, 1889, eight more applicants from the list of Aug. 31, 1888, were admitted to the school. Feb. 22, 1889, another examination was given to provide for a further supply of candidates, and similar examinations have since been held annually.

The Worthen street school, while used as a Training school, was a real school, in which the pupil-teachers did real work, under a close, but kindly supervision. The demand for substitutes was so great, however, that the work of the pupil-teachers was necessarily very irregular, and it was evident that to produce the best results a larger school with more teachers was a necessity. Accordingly, at the beginning of the September term, 1889, the school was transferred to a new house which had been built for it on Charles street, near Lawrence street. This building has six rooms which were used as school-rooms for the pupils, and another small room which was used as a class-room for the pupil-teachers. There were two hundred and fifty scholars in the school, all of primary grades except two small grammar classes. Here, as before, real work was done in the school-rooms, but there was added for the junior class a half-year's course of study, with regular attendance and daily recitations in psychology and the principles and methods of teaching. The middle class was engaged in substituting in other schools, the most of the time, under the careful supervision of the principal of the school, while the rooms of the Training school were in the direct charge of the senior class. To insure good work all along the line it was found necessary to provide permanent assistants, and Miss Emily H. Radcliffe was elected first assistant, and began work in October, and Miss Katharine T. Keyes, a graduate of the Salem Normal school, was elected second assistant, and began work in September, 1889. The following February the first regular class of ten graduated from the school, and all were elected to permanent positions before the end of the year. In June, 1890, another class

of four graduated, all of whom have also been elected to permanent positions.

To give the pupil-teachers more experience with grammar grades the Committee decided early in 1890 to extend the Training school to include six rooms of the Colburn school, but the change did not take place until October. Subsequent to that time the Training school teachers had full charge of the five rooms in the Charles street building, and of six rooms in the Colburn school building. The increase of work demanded another assistant, and in February, Miss Mabel W. Ewings, a graduate of Oswego Normal school, was engaged as third assistant. About the same time, Miss Radcliffe resigned and her place was filled by the promotion of Miss Keyes to the place of first assistant, and the transfer to the school of Miss Alice M. Clarke, whose varied but uniformly successful experience in several different grades of our public schools, culminating in eight years' service as first assistant in the Highland school, was full proof of her fitness for the place. In September, 1891, the remaining rooms of the Colburn school were absorbed by the Training school, and Mrs. Dewey's salary was increased to that of the grammar masters. Permanent teachers have been elected to the two rooms last added, so that the corps of teachers now consists of one principal, three assistants, and two permanent teachers. The pupil-teachers number forty-six, ten in the senior class, seventeen in the middle class, and nineteen in the junior. One room in the Charles street building, formerly used as a school-room, is now used for other purposes, so that there are now five rooms in this building and eight in the Colburn school building, with an average attendance of scholars for the last four months of five hundred and eleven, of whom three hundred and fifty are in the grammar department, and one hundred and sixty-one in the primary department. The school is in thoroughly good condition. The prejudice which was at first felt against it by some, on the ground that its pupils would suffer by being "practised upon" by inexperienced teachers, has almost died away. In the last half-year not a complaint of this

kind has been brought to the Superintendent, nor has one transfer been asked for because of dissatisfaction with the school, while a considerable number, who might have gone elsewhere, have gone to the Training school from choice. And, incidentally, it may be noted that while the question of economy was the last thing considered in the establishment of this school, it is now really educating its pupils at a less expense than the other schools of the city. The salary bills of the school for the last four months have amounted to \$2,601, an average for its 511 pupils of \$5.09. At the same rate for the year, the cost per pupil, for tuition only, will be \$12.72, against \$17.84 in the Grammar schools, and \$13.50 in the Primary schools. It is probable, however, that the pupil-teacher classes will be smaller in the future, making it necessary to employ more graduates as temporary teachers in the Training school, thus increasing the expense somewhat.

During the year thirty-eight pupil-teachers have graduated, eleven in February, and twenty-seven in June. Of the February class all but three have been elected permanent teachers. The others, as well as the most of the June class, have been employed nearly all the time as substitutes or temporary teachers.

So much for history and present condition. Now let us see how the school has answered the purpose for which it was established. Its first object was to *test* teachers, and the fact that there is not one of its graduates who has been elected to a position as teacher who is not doing excellent work, proves that it has not failed in this respect. Its second object was to provide teachers of successful experience to do the substituting in the other schools, and if it has not, as one enthusiastic Grammar master asserted lately, "improved the character of the substitute teaching a thousand per cent.," it has, beyond any question, and by universal testimony, produced most excellent results in this respect. The value of its normal school work is not so easy to estimate, but there is no doubt that it is very great. It gives to its pupil-teachers, at home and without expense,—nay more, with a salary paid them—a training which could only be obtained elsewhere at a cost which would be beyond

the means of most of them. That the opportunity thus afforded is not more highly appreciated by some is due to the fact that, until recently, experience in teaching was not a necessary condition to an appointment, and many young ladies were able to get schools as soon as they wished, without the necessity of waiting to go through a normal or training school. But such a state of affairs has almost entirely ceased to exist anywhere in cities of the size of Lowell. I do not think there is one in New England which does not now require of its candidates for teacher's positions, either successful experience or a normal or training school diploma. Country schools, with small salaries, can not put their standard so high, but cities insist, as is their right in view of the salaries they pay, upon either training or experience, or both. And Lowell could do no less, even though it had no Training school.

For the first three years the drafts upon the school for substitute teachers were so great as to seriously interfere with its best work, and there were obvious reasons for wishing to have and graduate large classes. This state of affairs ceased with the graduation of the class of twenty-seven last summer, and I am of the opinion that there should be a considerable reduction in the size of future classes, though a liberal margin may well be allowed for surplus teachers to meet an emergency like that caused by the "grip" the present week, when not only the full force of graduates and the entire senior class were employed, but five members of the middle and junior classes were also pressed into service. For the most part, however, the graduates have been able to do the substituting for the last four months, and the senior class has had but little to do. I am convinced that this is a mistake. The city has thus been paying a class of ten \$15 a month for which no service has been rendered. Either the course should be reduced to one year, doing away entirely with the term now allotted to substitute work, or else steady employment, either as substitutes or at the Training school, should be given all the members of the senior class, whether graduates have any work to do or not. Permanent positions, of course, should be filled only by graduates.

The average number of substitute and temporary teachers employed in our schools is from twenty-five to thirty, and the average number of permanent teachers elected each year, for the last twelve years, has been eleven.

It is a gratifying fact that the school has not only gained a reputation abroad which has brought to the Superintendent several letters from young ladies of other states, who wish to enter it, and has brought to one of the assistants an offer to go elsewhere at a considerably increased salary, but that it has given to its graduates a standing which has resulted in several offers to teach elsewhere. Only one, however, Miss Mary E. Lane, has chosen to accept such an offer, the others preferring to remain at home and wait awhile for a permanent position, rather than go elsewhere for the sake of immediate employment.

The following are the names of the graduates in February and June:

FEBRUARY CLASS, 1891.

Marietta Cassidy.	Alice A. Masterson.
Nellie F. Davidson.	Carrie A. Paul.
Agnes T. Fay.	Bertha M. Rowlandson.
Jennie E. Fay.	Helen M. Shean.
Mary F. Foss.	Elizabeth S. Worthley.
Cora M. Howe.	

JUNE CLASS, 1891.

Ella M. Breen.	Addie B. Merrill.
Maud A. Jones.	Mary F. Ward.
Grace F. Ward.	Carrie E. Erskine.
Katherine Kelly.	Jessie M. Rich.
Mary J. Carmichael.	Fannie Hardman.
Jeannette T. Costello.	Grace Scribner.
Lilla M. McEvoy.	Elizabeth F. Garra.
Loyola McCann.	Mary E. Lane.
Malvina Lamere.	Ella E. Prescott.
Lillian C. Wholey.	Harriet F. Adams.
Gertrude Allen.	Grace W. Balch.
Adelaide Crowley.	Ada E. Hoole.
Margaret J. Connors.	Jennie S. Noble.
Mabel D. Nickerson.	

COURSE OF STUDY.

"The making of the course of study," says Dr. E. E. White, "is the most important duty of the school officer," and he might have added that it is, too, one of the most difficult. A few theorists only seem to find it easy, and as no two of this class agree, the result of their labors is not very helpful to any one else. It is a most thankless task, too, for probably no course ever made was satisfactory to any one except the maker, and oftentimes it is anything but satisfactory to him. But, hard or easy, the task needs to be faced in Lowell, for our course of study is antiquated and undoubtedly needs revision. The rules of the School Committee provide that no changes shall be made in the course of study during the school year, but a revised course ought to be prepared in the next few months, so as to be ready for use in September next. Teachers, however, have no call to wait for a formal revision before entering upon such lines of work as the times demand. An effort has been made by the Superintendent, in a recent talk with the teachers, to indicate, in a general way, some of the changes which ought, in his opinion, to find expression in a revised course of study, and he has been greatly gratified by the hearty co-operation which has been promised him, as well as to find that several of his suggestions had been anticipated by many teachers, who are already doing far more advanced work than our schedule requires.

EVENING DRAWING SCHOOL.

Under the above head are included not only classes in free-hand, architectural, and machine drawing, but in practical design, and the crayon and modeling classes. These classes are a feature of Lowell's public school system, of which the city has good reason to be proud. The work done in them is equalled by few, and surpassed by none. It is "manual training" of the very best and most practical kind, and by its aid many have been fitted for successful work in some of the most important industrial positions. Even the modeling classes which, at first sight, seem to appeal to the æsthetic more than to the practical, have in them many wood carvers, stone cutters,

brass workers, and others, who find the skill they acquire here of the greatest advantage to them in the regular work of their vocations. And that these classes are appreciated is proved by the fact that the average daily attendance this year is fully one-third greater than it was last year.

SUMMARY FOR THE YEAR 1891.

CLASS.	Whole number of pupils on time book during term.			Average number of pupils belonging to the school.			Average attendance.			Per cent. of attendance.
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	
Architectural.....	99	3	102	72	2	74	48	2	50	68
Free-hand.....	125	180	305	104	153	257	70	109	179	70
Machine Drawing.....	178		178	125		125	90		90	72
Modelling.....	19	74	93	15	69	84	10	45	55	67
Practical Design.....	8	53	61	7	50	57	7	43	50	88
Totals.....	429	310	739	323	274	597	225	199	424	71

The report of the Evening schools will appear elsewhere, but it is, I think, proper that I say in addition, that this important department of our school system is in most excellent condition, and is doing a larger and better work than ever before, a fact that is very largely due to the efficiency and untiring zeal of the Supervisor, Mr. John A. Smith.

The work of the Truant Officers has been performed with discretion and faithfulness. The additional horse and carriage which have been provided for them, has enabled them to do a great deal more work than formerly, and the rule of the Committee ensuring regularity in their visits has also worked well.

CHANGE OF SUPERINTENDENT.

In May last, Superintendent Lawton announced that he would not be a candidate for re-election. All efforts to induce

him to change his purpose proved futile, and his successor, the present incumbent, was elected July 6, 1891.

Mr. Lawton had held the office for five years, and during that time had not only retained the entire confidence of the Committee, as was proved by successive unanimous re-elections, but was the wise counsellor and trusted friend of the great body of the teachers, who felt his withdrawal to be a personal as well as a public loss. A Lowell boy, he had been a pupil in all the grades of our schools; in early manhood he had been a successful teacher for a half-dozen years; a little later he had been a member of the School Committee for four years, while the years of legal study and practice which followed were a peculiarly valuable equipment for the not inconsiderable part of his duties which related to matters of law. He had looked at our schools from the inside, from the point of view of the pupil and the teacher, and from the outside, from the position of the school officer, the citizen, and the lawyer, and thus possessed, from the start, a great advantage over any one who had looked at them from either point of view only. To this equipment from experience he added qualities of mind and character which inspire confidence and exert influence. Progressive, and not unfrequently radical in thought, he was always conservative in action; a hater of shams and affectations, he was yet quick to recognize real merit, either in a teacher or a method; not hasty in action, but very sure to be right, the schools of Lowell were safe in his hands, and his retirement was a matter of general regret.

To the teachers of Lowell I desire to return more than formal thanks for cordial greetings at the beginning of my term of service, and hearty co-operation since.

Mr. John A. Smith, Supervisor of Evening schools, and Assistant Superintendent in fact if not in title, has rendered me invaluable assistance, for which I desire to make grateful acknowledgement.

To the School Committee I extend thanks for kindly consideration and generous support.

Respectfully submitted,

A. K. WHITCOMB,

Superintendent of Public Schools.

REPORT OF THE TRUANT COMMISSIONERS FOR THE YEAR 1891.

REPORT OF THE TRUANT COMMISSIONERS.

47

1891.	Absentees.	Truants.	Working without certificate.	Wandering about the streets.	New scholars.	Juvenile offenders.	Total number cases investigated.	Arrested.	Sentenced to the Reform School.	Placed on probation.	Visited second time.	Visited third time.	Working certificates issued — (14 to 16 years of age).	Working certificates approved — (13 to 14 years of age).
January	70	9	4	10	2	1	96	6	6	0	4	1	171	8
February	68	22	3	6	0	11	110	4	2	2	12	4	102	3
March	133	29	0	6	3	4	175	6	3	3	4	6	179	4
April	150	38	4	7	4	3	206	8	4	4	14	6	187	8
May	194	60	4	7	7	2	274	11	1	10	16	8	177	12
June	92	41	4	3	0	0	140	6	3	3	6	8	196	52
July .....	....	....	....	....	....	....	....	....	....	....	....	....	184	135
August .....	....	....	....	....	....	....	....	....	....	....	....	....	127	15
September	96	35	2	13	2	4	152	10	7	3	9	4	129	7
October	152	72	6	29	3	1	263	18	9	9	12	10	145	3
November	219	40	6	19	8	15	307	17	10	7	10	6	96	8
December	131	16	0	6	0	1	154	4	1	3	6	2	85	2
Totals	1275	362	33	106	29	42	1877	90	36	44	93	55	1778	187

APPENDIX.

A.

ROLL OF TEACHERS.

Giving Name, Grade, Residence, Date of Election, and Salary.

HIGH SCHOOL.

BROADWAY.

FRANK F. COBURN, principal, <i>Science</i> , 51 Mt. Vernon street,	1880	\$2500
FRANK B. SHERBURNE, <i>Language</i> , 58 Dover street	1883	1800
CYRUS W. IRISH, <i>Science</i> , 96 Mt. Vernon street	1885	1800
MARY A. WEBSTER, <i>Language and Mathematics</i> , 17 Varney street	1860	800
MARIETTA MELVIN, <i>Language</i> , 381 Merrimack street . . .	1859	700
ELIZABETH MCDANIELS, <i>Language and Literature</i> , 162 Stackpole street	1868	700
HARRIET C. HOVEY, <i>Language</i> , 12 Fourth street	1870	700
CHARLOTTE E. DRAPER, <i>Language and Science</i> , Belmont avenue, corner Talbot street	1870	700
ALICE J. CHASE, <i>Science and Mathematics</i> , 158 Stackpole street,	1877	700
SUSIE L. D. WATSON, <i>Mathematics and English</i> , 31 1-2 Dutton street	1885	700
ADELAIDE BAKER, <i>Language</i> , 98 Sixth street	1885	700
JENNIE L. ALLEN, <i>Mathematics and English</i> , 411 Middlesex street	1885	700
MAUD HADLEY, <i>Mathematics and English</i> , Cumberland road,	1887	700
EMMA L. BRADLEY, <i>Mathematics</i> , 347 Westford street . .	1890	650
GERTRUDE A. RODLIFF, <i>Mathematics</i> , 179 Pawtucket street .	1890	650
MARIETTA CASSIDY, <i>Language</i> , Mt. Grove street	1890	650

BARTLETT GRAMMAR SCHOOL.

CORNER HANCOCK AVENUE AND CLARK STREETS.

SAMUEL BEMENT, master, 428 Merrimack street . . .	1851	\$1800
MARY B. KENT, 1st and 2d, 428 Merrimack street . . .	1859	600
ABBIE E. FRENCH, 3d and 4th, 259 Beacon street . . .	1874	600
BELLE F. BATCHELDER, 5th and 6th, 7 Arlington street . .	1883	600
BELLE A. PRESCOTT, 7th and 8th, 29 Mt. Washington street,	1878	600
M. IDA HOWE, 9th and 10th, 54 Methuen street . . .	1873	600
FRANCES M. TALBOT, 9th and 10th, 29 A street . . .	1882	600
LOLA CHENEY, 11th and 12th, 142 Worthen street . . .	1882	600
AMY L. TUCKE, 11th and 12th, 92 Fletcher street . . .	1880	600

MORRILL SCHOOL.

COMMON AND ADAMS STREETS.

ELLEN F. COUGHLIN, principal, 2d and 3d, 155 Cross street,	1853	\$600
NELLIE M. BROWN, 1st and 2d, 158 Fletcher street . . .	1865	600
ANNIE M. COURTNEY, 4th and 5th, 8 Lagrange street . . .	1887	600
CHARLOTTE E. BROWN, 6th, 158 Fletcher street . . .	1870	600

SCHOOL STREET SCHOOL.

SCHOOL STREET, BETWEEN PAWTUCKET AND BOWERS STREETS.

EUGENIE L. HOGAN, principal, 1st, 2d, and 3d, 14 Gold street,	1889	\$600
FANNIE A. HARDY, 4th, 5th, and 6th, 10 Mass. corp. . .	1890	500

CROSS STREET SCHOOL.

CROSS STREET, BETWEEN FLETCHER AND SCHOOL STREETS.

SARAH E. SCALES, principal, 1st, 2d, and 3d, 10 Ralph street,	1866	\$600
ELLEN M. WHITE, 4th and 5th, 178 Westford street . . .	1863	600
ETHEL G. WHEELER, 6th, 185 Moody street . . .	1889	600

BUTLER GRAMMAR SCHOOL.

GORHAM STREET.

CORNELIUS F. CALLAHAN, master, 5 Fenwick street . . .	1884	\$1800
ALBERTIE T. LANE, 1st and 2d, 40 Walnut street . . .	1889	600
LAURA F. HOWE, 3d and 4th, 166 Stackpole street . . .	1856	600
NELLIE F. KEEFE, 5th and 6th, 41 Cedar street . . .	1879	600
NELLIE F. MURPHY, 7th and 8th, 50 Elm street . . .	1878	600
MARGARET T. MCCARTHY, 7th and 8th, 261 Market street .	1890	500
ANASTASIA C. CORBETT, 9th and 10th, 65 Gorham street .	1887	600

KATIE E. KELLEY, 9th and 10th, 97 Moore street . . .	1883	\$600
DELIA T. BRADY, 11th and 12th, 375 Central street . .	1877	600
MARY L. MCSORLEY, 11th and 12th, 20 Ash street . .	1879	600
MARY I. DONLON, 11th and 12th, 218 Gorham street . .	1890	500
AGNES L. DONOGHUE, 9th and 11th, 16 Royal street . .	1887	600

LYON STREET SCHOOL.

CORNER LYON AND CENTRAL STREETS.

ALICE T. LEE, principal, 1st and 2d, 1 South Walker street,	1878	\$600
ANABEL COSTELLO, 3d and 4th, 203 Nesmith street . .	1888	600
MARY J. MCCARRY, 5th, 23 Mead street	1881	600
NELLIE A. HUNT, 6th, 48 Elm street	1884	600

CARTER STREET SCHOOL.

CARTER STREET.

BELLE T. VINAL, principal, 1st and 2d, 11 Simpson place .	1873	\$600
GEORGIA A. HARDEN, 3d and 4th, corner Sherman and Pleasant streets	1885	600
CORNELIA M. DAVIS, 5th and 6th, 40 Rock street . . .	1871	600

AGAWAM STREET SCHOOL.

CORNER AGAWAM AND BARRINGTON STREETS.

MARY McLAUGHLIN, principal, 1st and 2d, 234 Lawrence street	1879	\$600
ANNIE M. LEE, 3d and 4th, 1 South Walker street . .	1885	600
MARY A. FAY, 5th and 6th, 94 Stackpole street . . .	1889	600

LONDON STREET SCHOOL.

CORNER LONDON AND WEST STREETS.

LIZZIE R. MAGUIRE, principal, 1st and 2d, 23 Lyon street .	1884	\$600
ROSE E. McVEY, 3d and 4th, 62 Gorham street	1887	600
MINNIE F. HILL, 5th and 6th, 28 Madison Street . . .	1887	600

WEED STREET SCHOOL.

CORNER GORHAM AND WEED STREETS.

MARY B. MCGOVERN, principal, 4th, 5th, and 6th, 13 Pearl street	1886	\$600
AGNES M. FOLEY, 1st, 2d, and 3d, 31 Newhall street . .	1887	600

LOWELL TRAINING SCHOOL.

CHARLES STREET AND LAWRENCE STREET.

JULIA M. DEWEY, principal, 12 Middlesex street . . .	1888	\$1800
KATHERINE T. KEYES, 1st assistant, 213 Market street . .	1889	800
ALICE M. CLARK, 2d assistant, 46 Chapel street . . .	1878	700
MABEL EWINGS, 3d assistant, 102 Stackpole street . . .	1891	600
CARRIE A. PAUL, 9 Huntington street	1891	450
HELEN M. SHEAN, 88 Lawrence street	1891	450

CENTRAL STREET SCHOOL.

CENTRAL STREET, OPPOSITE HUDSON STREET.

ELIZA COWLEY, principal, 1st and 2d, 178 Lawrence street,	1857	\$600
CHARLOTTE MCDANIELS, 3d and 4th, 162 Stackpole street,	1878	600
KATIE J. LAWLER, 4th and 5th, 104 High street . . .	1885	600
LILLA J. GREENHALGE, 6th, 133 Moore street	1871	600

CHAPEL STREET SCHOOL.

CHAPEL STREET, OPPOSITE POLLARD STREET.

KATIE E. MCOWEN, 1st, 2d, and 3d, 30 Linden street .	1882	\$600
MARY A. FARNHAM, 4th, 5th, and 6th, 28 Robinson street,	1887	600

COTTAGE STREET SCHOOL.

CORNER COTTAGE AND CHAPEL STREETS.

LUCY F. CARLETON, principal, 1st, 2d, and 3d, 42 Chapel street,	1855	\$600
MAGGIE A. HARRIHAN, 4th, 5th, and 6th, 20 Marshall street,	1882	600

AMES STREET SCHOOL.

CORNER LAWRENCE AND AMES STREETS.

AMANDA M. HADLEY, principal, 1st and 2d, 60 Lincoln street,	1870	\$600
KATIE F. MURPHY, 2d and 3d, 419 Central street . . .	1885	600
MARY E. DREW, 4th and 5th, 28 Wamesit street . . .	1868	600
LIZZIE M. HADLEY, 6th, Bartlett street	1869	600

CHARLES STREET SCHOOL.

CHARLES STREET, BETWEEN GORHAM AND CHAPEL STREETS.

ALICE T. OWENS, principal, 1st and 2d, 45 Walnut street,	1878	\$600
ELLA E. GARDNER, 3d, 6 Lombard street	1871	600
ANNIE E. SLAVIN, 4th, 125 South street	1887	600
MARGARET J. KING, 5th and 6th, 172 Stackpole street .	1891	450

EDSON GRAMMAR SCHOOL.

HIGHLAND STREET.

C. W. BURBANK, master, 92 Bowers street	1872	\$1800
FRANCES M. WEBSTER, 1st and 2d, 17 Varney street . .	1873	600
ROSALIE T. BURNS, 3d and 4th, 7 Prescott corp. . .	1878	600
NETTIE E. CARLETON, 4th and 5th, 42 Chapel street .	1867	600
CARRIE STONE, 5th and 6th, 13 Cottage street . . .	1885	600
ANNA A. SARGENT, 6th and 8th, 126 Appleton street .	1864	600
FANNY A. SCRIPTURE, 8th, 269 Central street . . .	1873	600
SARAH J. CROSBY, 8th and 9th, 151 Gorham street . .	1868	600
MARY L. KEITH, 10th, 106 Appleton street	1890	500
MARY A. BALCH, 10th and 11th, 130 Appleton street .	1865	600
KATE J. HAYES, 12th, 13 Floyd street	1879	600
MARGIE F. MARREN, 12th, 86 Mt. Vernon street . .	1886	600

ELIOT SCHOOL.

CORNER FAVOR AND SUMMER STREETS.

ELLEN A. STILLINGS, principal, 5th, 107 Howard street .	1875	\$600
ELLEN A. CORBETT, 1st and 2d, 65 Gorham street. . .	1878	600
NELLIE T. O'GRADY, 3d and 4th, 59 Newhall street . .	1881	600
WINIFRED HAGGERTY, 6th, 16 Huntington street . . .	1884	600

HOWARD STREET SCHOOL.

HOWARD STREET, BETWEEN CHELMSFORD AND HALE STREETS.

ELLEN A. BRIDGE, principal, 1st and 2d, 54 Tyler street,	1857	\$600
MARION E. GREENE, 3d and 4th, 113 Howard street . .	1884	600

GRAND STREET SCHOOL.

(Howard Street Annex.)

GRAND STREET, BETWEEN WESTFORD AND MIDDLESEX STREETS.

JENNIE M. BENNETT, 5th, 246 Westford street	1885	\$600
MINNIE A. WILLSON, 6th, cor. Hale and Cambridge streets,	1887	600

GREEN GRAMMAR SCHOOL.

MERRIMACK STREET.

A. L. BACHELLER, master, 287 Central street	1874	\$1800
RUTH B. BAILEY, 1st and 2d, 210 Moody street . . .	1871	600
CLARA A. HANAFORD, 3d and 4th, 404 Merrimack street .	1869	600
LIZZIE A. NOLAN, 5th and 6th, 74 Mt. Washington street,	1876	600

BLANCHE E. FAY, 7th and 8th, 44 Elm street . . .	1885	\$600
KATE F. CASSIDY, 9th and 10th, Mt. Grove street . .	1883	600
LENA A. GOOKIN, 9th and 10th, 5 Walden street . .	1880	600
CARRIE A. MILES, 8th and 11th, 12 Middlesex street .	1882	600
ELLA J. CARLTON, 11th and 12th, 316 Bridge street .	1882	600
KATE F. MCCARTHY, 11th and 12th, 261 Market street .	1889	600

KIRK STREET SCHOOL.

CORNER KIRK AND LEE STREETS.

ELIZA A. DAVIS, principal, 1st, 2d, and 3d, 40 Rock street,	1881	\$600
LAURA H. PALMER, 4th, 5th, and 6th, 167 Bridge street .	1882	600

CABOT STREET SCHOOL.

CORNER CABOT AND FORD STREETS.

NELLIE T. GILDAY, principal, 5th and 6th, 14 Varney street,	1886	\$600
MARTHA A. NEAL, 5th and 6th, 11 Dodge Street . .	1847	600
MARY J. MURPHY, 3d and 4th, 34 Jefferson street . .	1887	600
ABBIE V. WHEELER, 1st and 2d, 185 Moody street . .	1879	600

CHEEVER STREET SCHOOL.

CHEEVER STREET.

IDA J. CLARKE, principal, 5th and 6th, 157 Moody street .	1887	\$600
KATHERINE T. LENNON, 4th and 5th, corner Bowers and School streets	1885	600
MARY E. MEEHAN, 5th and 6th, 129 Worthen street . .	1891	450
BERTHA M. ROWLANDSON, 5th and 6th, 21 Mead street .	1891	450

WORTHEN STREET SCHOOL.

WORTHEN STREET, BETWEEN MARKET AND BROADWAY.

MARY L. HILL, principal, 1st and 2d, 126 Worthen street,	1858	\$600
ESTHER V. GREEN, 3d and 4th, corner Cross and Mt. Vernon streets	1889	600
MARY J. ALGER, 5th, 9 Tyler street	1868	600
MARY R. MARREN, 6th, 86 Mt. Washington street . .	1890	500

HIGHLAND GRAMMAR SCHOOL.

WEST PINE STREET.

CHAS. W. MOREY, master, 14 Belmont street . . .	1880	\$1800
FLORA I. MOFFITT, 1st and 2d, 43 Tyler street . . .	1887	600
MARY F. FOSS, 1st and 2d, 101 Stevens street . . .	1891	450
ABBIE F. WOODWARD, 3d and 4th, 73 Branch street . . .	1869	600
ESTELLE L. WHITNEY, 3d and 4th, 101 Chapel street . . .	1885	600
ADELAIDE F. BENNETT, 4th, 5th, and 6th, 126 Walker street, .	1882	600
NELLIE A. COBURN, 5th and 6th, South Walker street . . .	1886	600
LUELLA A. WARDWELL, 6th, 7th, and 8th, 30 School street .	1870	600
MINNIE C. GRAY, 7th and 8th, 78 Liberty street . . .	1890	500
FANNIE M. CLARK, 8th, 9th, and 10th, 30 School street . .	1874	600
EDITH L. MONROE, 9th and 10th, Billerica	1885	600
HATTIE B. FRYE, 11th and 12th, 26 Walker street . . .	1882	600
CARRIE M. SPRAGUE, 11th and 12th, 119 Howard street . .	1890	500
ELLEN L. FLOYD, 9th and 10th, 86 Stevens street . . .	1887	600
ARVILLA L. READER, 11th and 12th, 106 Appleton street . .	1871	600

FRANKLIN SCHOOL.

CORNER BRANCH AND MIDDLESEX STREETS.

SARAH C. FISKE, principal, 1st and 2d, 134 Appleton street .	1866	\$600
LIZZIE S. LOWE, 3d and 4th, 3 Nichols street	1857	600
MARION J. STEVENSON, 5th, 45 Princeton street	1878	600
KATIE G. JONES, 6th, 49 Andover street	1880	600

PLAIN STREET SCHOOL.

CORNER PLAIN AND POWELL STREETS.

LAURA E. LEE, principal, 4th, 5th, and 6th, 141 Grand street,	1873	\$600
FLORA H. SPRAGUE, 1st, 2d, and 3d, 14 School street . . .	1882	600

DOVER STREET SCHOOL.

DOVER STREET, BETWEEN MIDDLESEX AND GROVE STREETS.

CLARA B. HORNE, principal, 1st and 2d, 20 South Highland street	1877	\$600
CLEMENTINE H. BOWERS, 3d and 4th, 18 Loring street . .	1876	600
BERTHA GARDNER, 5th and 6th, 68 French street	1887	600

POWELL STREET SCHOOL.

POWELL STREET, NEAR LIBERTY STREET.

VIOLA A. HAMBLETT, principal, 4th, 5th, and 6th, 60 School street	1876	\$600
CARRIE J. BAILEY, 1st, 2d, and 3d, 16 Loring street .	1884	600

MIDDLESEX VILLAGE SCHOOL.

HATTIE F. WAKEFIELD, ungraded, 2 Loring street . .	1889	\$600
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MOODY GRAMMAR SCHOOL.

CORNER HIGH AND EAST MERRIMACK STREETS.

WM. S. GREENE, master, 195 Westford street . . .	1883	\$1800
MERCENA F. WHITEHORN, 1st and 2d, 389 Beacon street .	1877	600
MARY E. WAY, 3d and 4th, 22 Tyler street . . .	1858	600
CARRIE F. SMITH, 5th and 6th, 92 E. Merrimack street .	1883	600
ELIZABETH W. FROST, 7th and 8th, 132 E. Merrimack st.,	1857	600
ELIZABETH A. BALCH, 7th and 8th, 133 E. Merrimack st.,	1873	600
LAURA J. PINDAR, 9th and 10th, 35 Tyler street . .	1856	600
FRANCES E. HARDMAN, 11th and 12th, 158 Stackpole st.,	1873	600
FRANCES E. GARITY, 9th, 10th, 11th, and 12th, 22 Read st. .	1874	600

POND STREET SCHOOL.

CORNER HIGH AND POND STREETS.

MARIETTA HILL, principal, 1st, 2d, and 3d, 122 Stackpole st.,	1870	\$600
LIZZIE A. MOLLOY, 4th, 5th, and 6th, 84 High street .	1887	600

HIGH STREET SCHOOL.

HIGH STREET, BETWEEN CHESTNUT AND EVERETT STREETS.

CLARA A. EMERSON, principal, 1st, 2d, and 3d, 79 Appleton street	1869	\$600
ELIZABETH A. WORTHLEY, 4th, 5th, and 6th, 21 Canada st.,	1891	450

FAYETTE STREET SCHOOL.

FAYETTE STREET, BETWEEN CHESTNUT AND EVERETT STREETS.

HELEN KOHAWN, principal, 1st, 2d, and 3d, 17 Thirteenth st.,	1877	\$600
JENNIE E. FAY, 4th, 5th, and 6th, 94 Stackpole street .	1891	450

SYCAMORE STREET SCHOOL.

SYCAMORE STREET.

ALICE B. BESSE, ungraded, Rogers street	1891	\$450
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PAWTUCKET GRAMMAR SCHOOL.

MAMMOTH ROAD, PAWTUCKETVILLE.

WM. P. BARRY, master, 62 Suffolk street	1887	\$1800
NELLIE MACDONALD, 1st and 2d, 10 Marsh street . .	1878	600
CARRIE M. HART, 3d and 4th, 6 Varney street . . .	1887	600
CELESTIA P. CHASE, 5th, 6th, 7th, and 8th, 131 School st.,	1867	600
JULIA M. HEALEY, 9th and 10th, 80 Bowers street . .	1870	600
EFFIE I. MARSHALL, 11th and 12th, 6 Riverside street .	1887	600

MAMMOTH ROAD SCHOOL.

PAWTUCKET SCHOOL BUILDING.

ELLEN M. HOLDEN, principal, 1st, 2d, and 3d, 3 South Loring street	1876	\$600
ALICE M. BACHHELDER, 3d, 4th, and 5th, 7 Arlington st. .	1887	600
NELLIE F. DAVIDSON, 5th and 6th, 3 Lombard street . .	1891	450

VARNUM AVENUE SCHOOL.

—— ———, ungraded ———.

VARNUM GRAMMAR SCHOOL.

MYRTLE STREET, CENTRALVILLE.

GEORGE W. HOWE, master, 54 Methuen street	1880	\$1800
GEORGIANNA F. VINTON, 1st and 2d, 32 Fourth street .	1872	600
HARRIET BRADLEY, 3d and 4th, 38 Fourth street . .	1854	600
LIZZIE C. KENNEDY, 5th and 6th, Eighteenth street . .	1884	600
MINNIE F. WING, 6th and 7th, 43 Third street . . .	1879	600
SARAH A. BRADLEY, 7th and 8th, 145 Bridge street . .	1857	600
MARIA W. ROBERTS, 8th and 9th, 53 Third street . .	1875	600
ALICE R. KEESE, 9th and 10th, 4 Sanborn street . . .	1881	600
LIZZIE A. HART, 10th and 11th, 6 Varney street . . .	1886	600
ROSA A. DOWD, 11th and 12th, 77 Tenth street . . .	1884	600
JULIA WILLIAMS, 11th and 12th, 17 Fifth street . . .	1886	600
DELIA J. SMITH, 11th and 12th, 73 Fayette street . .	1891	450

WEST SIXTH STREET SCHOOL.

WEST SIXTH, BETWEEN COBURN AND JEWETT STREETS, CENTRALVILLE.

STELLA J. ALLEN, principal, 1st and 2d, 55 Third street .	1879	\$600
HATTIE A. PALMER, 2d and 3d, 12 E. Merrimack street,	1888	600
MARION S. KEYES, 4th and 5th, 64 Third street . .	1888	600
LIZZIE F. LAMERE, 6th, 213 Bridge street	1887	600

TENTH STREET SCHOOL.

CORNER TENTH AND VARNUM STREETS, CENTRALVILLE.

MARY F. BEANE, principal, 1st and 2d, 78 Tenth street .	1879	\$600
FANNIE H. MURPHY, 2d and 3d, Twelfth street . . .	1889	600
ALICE A. HOLTHAM, 4th and 5th, 365 Bridge street . .	1887	600
ELLA A. BAILEY, 6th, 164 Bridge street	1869	600

LAKEVIEW AVENUE SCHOOL.

LAKEVIEW AVENUE, CENTRALVILLE.

MARIETTA F. CROWLEY, principal, 1st and 2d, 23 Marion st.,	1879	\$600
HATTIE S. SIMPSON, 3d and 4th, 48 Third street . . .	1887	600
MARGARET J. MCCLUSKEY, 5th, 77 Lakeview avenue . .	1890	500
AGNES T. COURTNEY, 6th, Salem street	1891	450

FOURTH STREET SCHOOL.

HELEN M. BROWN, ungraded, 141 Bridge street	1888	\$600
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TEACHER OF PENMANSHIP.

THOMAS M. GRAVES, 64 Beach street	1883	\$1250
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MUSICAL DIRECTOR.

WALTER E. OWEN, 33 Oak street	1886	\$1250
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TEACHER OF DRAWING.

OLIVE E. UNDERHILL, 51 Branch street	1887	\$1250
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TEACHER OF SEWING.

IDA J. FLINT, 142 Liberty street	1880	\$800
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MILITARY INSTRUCTOR.

ALEXANDER GREIG, JR., 38 Cambridge street	1891	\$250
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TEACHER OF PHYSICAL CULTURE.

EMMA M. HUNTLEY.

B.**SALARIES OF TEACHERS.****HIGH SCHOOL.**

Principal	\$2500 00
Male Assistants	1800 00
First Female Assistant	800 00
Other Female Assistants, first year	600 00
Other Female Assistants, second year	650 00
Other Female Assistants, after second year	700 00

GRAMMAR SCHOOLS.

Principals (males)	\$1800 00
Assistants, first year	450 00
Assistants, second year	500 00
Assistants, third year and after	600 00
Teacher of Penmanship	1250 00
Teacher of Drawing	1250 00
Teacher of Music	1250 00

PRIMARY SCHOOLS.

Teachers, first year	\$450 00
Teachers, second year	500 00
Teachers, third year and after	600 00

TRAINING SCHOOL.

Principal	\$1800 00
First Assistant	800 00
Second Assistant	700 00
Third Assistant	600 00

TEMPORARY TEACHERS.

Male teachers, for every school day's service	\$3 00
Female teachers in High school, for every school day's service	1 75
Female teachers in other schools, for every school day's service	1 25

EVENING SCHOOLS.

Principals, High school, per evening	\$5 00
Principals, Elementary, per evening	2 00
Assistants, High school, per evening	2 00
Female Assistants, Elementary schools, per evening	1 25

C.

TEXT-BOOKS USED IN THE PUBLIC SCHOOLS.

Hillard's Readers, Franklin Series.

PRIMARY SCHOOLS.

First Reader.
 Second Reader.
 Third Reader.
 Franklin Primary Arithmetic.

Munroe's Reading Charts.
 Primary Music Reader.
 Normal Music Chart.

GRAMMAR SCHOOLS.

Fourth Reader.
 Intermediate Reader.
 Fifth Reader.
 Bradbury's Eaton's Practical Arithmetic.
 Patterson's Grammar.
 Hyde Lessons in English.
 Swinton's Elementary Geography.
 Swinton's Grammar School Geography, New
 England Edition.
 Scudder's Short History of the United States.

Scudder's History of the United States.
 Worcester's New Pronouncing Spelling Book.
 Worcester's Comprehensive Dictionary.
 Thomson's Intellectual Arithmetic.
 Spencerian Writing Books.
 Prang's Drawing Books. Complete Course.
 Goodrich's Child's Book of United States His-
 tory.
 Intermediate Music Reader.
 Fourth Abridged Music Lessons.

HIGH SCHOOL.

Allen and Greenough's Latin Grammar.
 Leighton's Latin Lessons.
 Allen and Greenough's Cæsar.
 Allen and Greenough's Virgil.
 Allen and Greenough's Cicero.
 Allen and Greenough's Ovid.
 Allen's Latin Composition.
 White's Latin Lexicon.
 Goodwin's Greek Grammar.
 White's Greek Lessons.
 Goodwin's Greek Reader.
 Homer.
 Liddell and Scott's Greek Lexicon (abridged).
 Bocher's Otto's French Grammar.
 Super's French Reader.
 Fisher's Easy French Readings.
 Bocher's College Plays.
 Heath's French Dictionary.
 Otto's German Grammar.
 Otto's German Reader.
 Methode Berlitz.
 Adler's German Dictionary.
 Eaton's Practical Arithmetic.
 Wentworth's High School Arithmetic.
 Eaton's Algebra.
 Bradbury's Trigonometry.
 Davies' Surveying.
 Meiklejohn's English Grammar.
 Lockwood's Lessons in English Compositions.
 Class Book of Prose and Poetry.

Kellogg's Rhetoric.
 Arnolds English Literature.
 Underwood's Hand Book of American Authors.
 Selected American Poems.
 Selected Ballads and Lyrics.
 Swinton's Outlines of History.
 Curnow's History of England.
 Leighton's History of Rome.
 Pennell's History of Greece.
 Pennell's History of Rome.
 Martin's Civil Government.
 Winslow's Intellectual Philosophy.
 Cooley's Natural Philosophy.
 Avery's Natural Philosophy.
 Sharpless and Phillip's Astronomy.
 Avery's Chemistry.
 Eliot and Storer's Manual of Chemistry.
 Eliot and Storer's Qualitative Analysis.
 Dana's Geological Story.
 Gray's Botany.
 Walker's Physiology.
 Warren's Physical Geography.
 Tozer's Classical Geography.
 Meservey's Book-keeping.
 Eichberg's Music Reader.
 Upton's Infantry Tactics.
 Stewart's Elementary Physics.
 Todhunter's Algebra.
 Wentworth's Geometry.
 Bryce's Æneid (last six books).

D.

COURSE OF STUDY FOR THE PRIMARY SCHOOLS.

FIRST YEAR.

FIRST HALF — Munroe's Charts and Franklin First Reader. Begin with words written upon the blackboard, using the names of familiar objects, and words expressing familiar acts.

Combine words into groups and sentences.

Pay particular attention to *tones* and *inflection*.

Spell the words in columns, by sounds.

Develop the idea of number to ten, by the use of objects. Count to one hundred on the numeral frame.

Teach the construction of letters and figures, and the simplest form of script letters, using slate and blackboard.

SECOND HALF — Munroe's Charts and First Reader. Spell by sound.

Write words, groups of words, and sentences upon the blackboard, and require pupils to copy upon the slate. Give special attention to the forms of the letters.

Add and subtract small numbers, using numeral frame and objects.

Teach Roman numerals to L.

Follow the Grube Method in numbers as far as to 4.

Practice object teaching, using such objects as are familiar to the child.

SECOND YEAR.

FIRST HALF — Second Reader. Practice "Enunciation Exercises" daily.

Spell, by letters and by sounds, words in columns and in reading lessons.

Teach the simplest form of script letters.

Teach Arithmetic orally. Grube Method as high as 8.

Teach Roman numerals to M.

SECOND HALF — Second and Third Readers. Practice "Enunciation Exercises" daily.

Continue to teach the simplest form of script letters, and write sentences from dictation upon the slate.

Teach Arithmetic, using the Franklin Primary, and see that the pupils read the questions fluently and correctly before solving them. Teach multiplication table to 8 x 8.

THIRD YEAR.

FIRST HALF — Third Reader. Daily practice of exercise in enunciation. Spell words in columns and in reading lessons, by letters and by sounds. Teach the meaning of the words found in the reading lessons, and require scholars to use their own language in defining. Correct all faults in expression.

Teach all script letters, and require words and sentences to be written from dictation, upon paper.

Review the Arithmetic taught during the second year, by oral questions similar to those in the text-books, and advance as far as practicable. Teach multiplication table as far as 10×10 .

SECOND HALF — Third Reader; continue exercises in enunciation, spelling, definitions, etc.

Language Lessons.

Review and complete the Arithmetic. Teach multiplication table to 12×12 .

Drawing should be taught in all the classes except first half of first year.

In drawing and singing, follow the directions of the special teachers.

In each school a few minutes should be devoted at every session to physical exercises.

Monroe's Charts may be used at pleasure throughout the course.

E.

GRAMMAR SCHOOLS.

FOURTH YEAR.

READING — Fourth Reader. Especial attention should be given the Introductory Exercises and the lessons in spelling and defining at the beginning of each reading lesson.

SPELLING — Worcester's New Pronouncing Speller. First Half, to page 29. Second Half, from page 29 to 47.

ARITHMETIC — From dictation; numeration and notation, addition and multiplication; amounts not to exceed a million. Second Half, from dictation; numeration and notation; addition and multiplication, subtraction and long division, not to exceed three periods. In subtraction, not more than two figures in the minuend to be less than the figures below them, and in division the divisor not to exceed 25.

LANGUAGE — Hyde's Lessons in English. First Half, to page 57 ; Second Half, from page 57 to 114.

GEOGRAPHY — Swinton's Elementary. First Half, to page 40 ; Second Half, from page 40 to 64.

HISTORY — Child's Book of History as a reader.

MENTAL ARITHMETIC — Thomson's Intellectual. Omit subtraction. First Half, to page 31 ; Second Half, including subtraction, from page 31 to 38.

FIFTH YEAR.

READING — Fourth Reader, with daily drill on Introductory Exercises, spelling, and defining.

SPELLING — Worcester's New Pronouncing Speller. First Half, from page 47 to 69 ; Second Half, from page 69 to 93.

ARITHMETIC — Bradbury's Eaton's Practical. First Half, to page 60 ; Second Half, from page 60 to 87.

LANGUAGE — Hyde's Lessons in English. First Half, from page 114 to 129 ; Second Half, Review.

GEOGRAPHY — Swinton's Elementary Geography. First Half, from page 64 to 82 ; Second Half, from page 82 to end.

HISTORY — Scudder's Short History as a reader.

MENTAL ARITHMETIC — Thomson's Intellectual. First Half, to page 42 ; Second Half, from page 42 to 65.

SIXTH YEAR.

READING — Franklin Intermediate, with drill on Introductory Exercises daily; spelling and defining.

SPELLING — Worcester's New Pronouncing Speller. First Half, from page 93 to 111 ; Second Half, from page 111 to 125.

ARITHMETIC — Bradbury's Eaton's Practical. First Half, from page 89 to 102 ; Second Half, from page 102 to 134.

GRAMMAR — Patterson's Elements. First Half, page 28 ; Second Half, from page 28 to 46.

GEOGRAPHY — Swinton's Grammar School Geography. First Half, to page 24 ; Second Half, from page 24 to 50.

HISTORY — Scudder's Short History as a reading book.

MENTAL ARITHMETIC — Thomson's Intellectual. First Half, from page 60 to 80 ; Second Half, omitting compound numbers, from page 80 to 108.

SEVENTH YEAR.

READING — Franklin Intermediate Reader, with drill on exercises to secure distinct articulation and correct pronunciation and expression.

- SPELLING — Worcester's New Pronouncing Speller. First Half, from page 125 to 135; Second Half, from page 135 to 145.
- ARITHMETIC — Bradbury's Eaton's Practical. First Half, from page 134 to 160; Second Half, from page 160 to 180.
- GRAMMAR — Paterson's Elements. First Half, from page 46 to 76; Second Half, from page 76 to 117.
- GEOGRAPHY — Swinton's Grammar School. First Half, from page 50 to 70; Second Half, from page 70 to 86.
- HISTORY — Scudder's History of the United States, to be taught "by reading and familiar conversation." First Half to page 65; Second Half, from page 65 to 143.
- MENTAL ARITHMETIC — Thomson's Intellectual. First Half, from page 90 to 108; Second Half, omitting interest, etc., from page 108 to 127.

EIGHTH YEAR.

- READING — Fifth Reader, with drill on Introductory Treatise. Spelling and definitions.
- SPELLING — Worcester's New Pronouncing Speller. First Half, from page 145 to 155; Second Half, from page 155 to 163.
- ARITHMETIC — Bradbury's Eaton's Practical. First Half, from page 180 to 204; Second Half, from page 204 to 229.
- GRAMMAR — Patterson's Elements. First Half, from page 117 to 138; Second Half, from page 138 to 166.
- GEOGRAPHY — Swinton's Grammar School. First Half, from page 86 to 102; Second Half, from page 102 to the end.
- HISTORY — Scudder's History of the United States. First Half, from page 143 to 239; Second Half, from page 239 to 329.
- MENTAL ARITHMETIC — Thomson's Intellectual. First Half, omitting Bank Discount, from page 117 to 126; Second Half, from page 126 to 133.

NINTH YEAR.

- READING. — Fifth Reader, systematic teaching of the Introductory Treatise.
- SPELLING — Worcester's New Pronouncing Speller. First Half, from page 163 to end; Second Half, review whole book.
- ARITHMETIC — Bradbury's Eaton's Practical. First Half, from page 229 to 263; Second Half, review from beginning.
- GRAMMAR — Patterson's Elements. First Half, from page 166 to end; Second Half, review from beginning.
- GEOGRAPHY — Swinton's Grammar School. Review from beginning.

HISTORY — Scudder's History of the United States. First Half, from page 329 to 433; Second Half, review from beginning.

MENTAL ARITHMETIC — Thomson's Intellectual. First Half, from page 133 to end; Second Half, review from beginning.

GENERAL DIRECTIONS.

In Arithmetic, mental work to accompany written work daily.

In Geography, discriminate between the important and unimportant details in assigning lessons. Use as reading lessons in the Grammar School Geography, the separate States, the separate countries of South America, of Europe, of Asia, and of Africa.

Spell and define words in the various text books. Oral spelling should be combined with written spelling, but the latter should predominate. In all spelling exercises pronounce the word but *once*, to induce habits of attention.

Teachers will make frequent reviews of their own work, and also of *the work of preceding years*, for which they will be held responsible in examinations.

Declamations once a month by boys of First and Second Classes.

Compositions each week in every class. Elements of Bookkeeping, Writing, Drawing, and Music throughout the entire course.

F.

HIGH SCHOOL.

ENGLISH COURSE.

FIRST YEAR.

First Term.

Algebra.
Outlines of History.
English Lessons.

Second Term.

Algebra.
English History.
English Lessons.

SECOND YEAR.

First Term.

Geometry.
Natural Philosophy.
Physical Geography.
French.

Second Term.

Geometry.
Natural Philosophy.
Chemistry.
English Grammar.
French.

APPENDIX.

THIRD YEAR.

<i>First Term.</i>	<i>Second Term.</i>
Arithmetic.	Physiology.
Rhetoric.	Political Science.
Chemistry.	Geology.
French.	French.

CLASSICAL COURSE.

FIRST YEAR.

<i>First Term.</i>	<i>Second Term.</i>
Algebra.	Algebra.
Latin.	Latin.
English Lessons.	Natural Philosophy.

SECOND YEAR.

<i>First Term.</i>	<i>Second Term.</i>
Cæsar.	Cæsar.
Geometry.	Geometry.
Natural Philosophy.	Chemistry.
French.	French.

THIRD YEAR.

<i>First Term.</i>	<i>Second Term.</i>
Virgil.	Virgil.
Rhetoric.	Political Science.
Chemistry.	Geology.
French.	French.

FOURTH YEAR.

<i>First Term.</i>	<i>Second Term.</i>
Cicero.	Cicero.
Astronomy.	Botany.
Literature.	Literature.
German.	German.

COLLEGE COURSE.

FIRST YEAR.

<i>First Term.</i>	<i>Second Term.</i>
Algebra.	Algebra.
Latin.	Latin.
Greek History.	Roman History.

SECOND YEAR.

First Term.
Cæsar.
Geometry.
Greek.

Second Term.
Cæsar.
Geometry.
Greek Reader.

THIRD YEAR.

First Term.
Cicero.
Greek Reader,
Mathematics.

Second Term.
Cicero.
Xenophon.
Mathematics.

FOURTH YEAR.

First Term.
Virgil.
Xenophon.
Physics.

Second Term.
Virgil.
Herodotus.
Physics.

FIFTH YEAR.

First Term.
Virgil and Nepos (at sight).
Homer.
French.

Second Term.
Latin Reviews.
Greek Reviews.
French.

NOTE A — Each scholar is expected to pursue three regular studies; any change from this rule must be subject to the approval of the principal.

NOTE B — Composition, Declamation, Reading, Music, and Military Instruction are required throughout the course.

NOTE C — Bookkeeping is elective.

SUMMARY OF THE ANNUAL RETURNS OF THE PUBLIC SCHOOLS OF THE CITY OF LOWELL, FOR THE YEAR ENDING DEC. 18, 1891.

SCHOOL.	LOCATION.	Number of pupils belonging Dec. 18, 1891.			Whole No. of pupils on time books since Jan. 1, 1891.			Aver. No. of pupils belonging to school.			Average daily attendance.		No. entered, not received from any other public school.	Received from other public schools of lower grade.	Received from other public schools of same grade.	Sent to other public schools of higher grade.	Sent to other public schools of same grade.	Number having certificates of schooling for mills.	Number over fourteen years of age.	Number between ten and fourteen years of age.	Number between six and ten years of age.	No. under six years of age.	Per cent. of attendance.
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.											
High	Broadway	206	253	459	295	346	641	209	256	465	198	243	441	20	178	15	21	6	631	10	37	.....	95
Bartlett (Gram) PRIMARIES.	Cor. Clark St. and Hancock Ave	161	153	314	231	205	436	163	145	308	146	133	279	20	98	15	21	6	82	317	37	.....	90
Cross St.	Cross St., near Mt. Vernon St.	63	65	128	90	111	201	56	62	118	52	57	109	65	....	20	32	15	1	26	151	24	92
Morrill	Common and Adams Sts.	126	85	211	200	170	370	111	81	192	102	74	176	130	....	17	44	19	15	98	212	45	92
School St.	School St., bet. Pawtucket and Bowers	39	43	82	77	75	152	45	38	83	41	32	73	51	....	7	35	15	1	18	120	13	88
	Totals for Primaries.....	228	193	421	367	356	723	212	181	393	195	163	358	246	....	44	111	49	1	142	483	82	90.2
Butler (Gram.) PRIMARIES.	Gorham St.	247	294	481	328	308	636	229	202	431	210	184	394	40	115	29	31	38	130	472	34	.....	91
Agawam St.	Cor. Agawam and Barrington Sts.	78	62	140	109	94	203	82	64	146	77	57	134	56	....	3	23	12	1	45	138	20	91
Carter St.	Carter St.	66	72	138	104	110	214	58	72	130	53	66	119	60	....	17	26	26	1	31	164	17	91
London St.	Cor. London and West Sts.	69	64	133	107	94	201	76	67	143	70	63	133	68	20	15	30	12	....	18	144	39	93
Lyon St.	Cor. Central and Lyon Sts.	95	97	192	129	132	261	85	90	175	78	78	156	60	....	21	30	17	1	57	164	40	89
Weed St.	Cor. Gorham and Weed Sts.	39	38	77	60	62	122	39	35	74	36	32	68	27	....	20	16	9	....	26	88	8	91
	Totals for Primaries.....	347	333	680	509	492	1001	340	328	668	314	296	610	271	20	76	125	76	3	177	698	104	91

Colburn (Gram.)	Lawrence St.....	193	149	342	303	231	534	192	141	333	171	129	300	68	130	30	28	26	32	66	411	57	....	91
PRIMARIES.																								
Ames St.....	Cor. Ames and Lawrence Sts.....	71	60	131	112	107	219	74	73	147	68	68	136	88	....	20	36	22	....	3	56	145	15	92
Central St.....	Central St., opposite Hudson St.....	79	87	166	118	125	243	76	85	161	68	75	143	53	....	10	31	18	1	1	59	147	36	89
Chapel St.....	Chapel St., opposite Pollard St.....	43	41	84	65	58	123	43	37	80	40	34	74	24	....	9	17	10	....	....	16	97	10	92
Charles St.....	Charles St., near Gorham St.....	90	70	160	124	132	256	66	79	145	65	68	133	67	....	22	18	27	4	2	47	187	20	91
Cottage St.....	Cor. Chapel and Cottage Sts.....	43	26	69	58	44	102	36	24	60	31	20	51	12	8	16	11	12	....	....	35	62	5	84
Training Sch...	Charles St., near Lawrence St.....	92	78	170	160	156	316	84	72	156	72	61	133	66	..	46	49	20	....	4	62	207	43	86
	Totals for Primaries.....	418	362	780	637	622	1259	379	370	749	344	326	670	310	8	123	162	109	5	7	275	845	129	89
Edson (Gram.)	Cor. Highland and South Sts.....	248	235	483	325	323	648	220	217	437	201	198	399	31	126	22	20	32	20	192	385	70	....	91
PRIMARIES.																								
Elhot	Cor. Favor and Summer Sts.....	78	112	190	156	170	326	79	96	175	72	87	159	77	....	60	34	47	1	3	88	216	19	91
Howard St.....	Howard St., near Hale St.....	71	88	159	125	133	258	67	80	147	60	71	131	64	....	32	34	33	...	2	48	197	11	89
	Totals for Primaries.....	149	200	349	281	303	584	146	176	322	132	158	290	141	....	92	68	80	1	5	136	413	30	90
Green (Gram.)	Merrimack St., opposite Colburn St..	224	210	434	347	304	651	218	201	419	199	181	380	73	117	36	22	27	23	157	437	57	....	92
PRIMARIES.																								
Cabot St.....	Cor. Cabot and Ford Sts.....	115	91	206	262	205	467	118	82	200	107	72	179	216	....	26	53	23	14	18	158	217	74	89
Cheever St.....	Cor. Cheever and Tucker Sts.....	75	58	133	238	176	414	97	58	155	86	49	135	409	....	5	...	4	16	13	158	189	54	87
Kirk St.....	Cor. Kirk and Lee Sts.....	58	68	126	103	117	220	51	61	112	47	55	102	67	....	33	35	29	....	....	23	173	24	91
Worthen St....	Worthen St., bet. B'dway and Market	87	74	161	170	146	316	80	64	144	71	61	132	147	....	39	47	45	....	....	64	204	48	91
	Totals for Primaries	335	291	626	773	644	1417	346	265	611	311	237	548	839	....	103	135	101	30	31	403	783	200	89.2
Highland (Gm)	Pine St.....	311	332	643	415	440	855	290	306	596	265	276	541	46	131	60	52	25	6	262	514	79	....	91
PRIMARIES.																								
Dover St.....	Dover St., near Grove St.....	57	70	127	93	114	207	56	68	124	50	62	112	54	....	18	46	10	....	....	9	166	32	90
Franklin.....	Cor. Middlesex and Branch Sts.	120	109	229	179	160	339	103	92	195	92	82	174	84	....	44	30	31	3	7	98	223	11	89
Middlesex Vil..	Middlesex Vil., near 954 Middlesex St.	19	14	33	27	21	48	19	15	34	17	13	30	40	....	8	4	4	....	....	6	24	10	89
Plain St.....	Cor. Plain and Chelmsford Sts.....	61	55	116	87	85	172	59	52	111	53	49	102	37	....	23	21	18	....	....	17	132	23	91
Powell St.....	Powell St., near Liberty St.....	49	38	87	83	69	152	48	39	87	43	36	79	39	....	23	33	17	....	....	16	116	20	91
	Totals for Primaries.....	287	262	559	442	428	870	266	251	517	238	229	467	214	....	108	130	76	3	7	140	637	86	90.1
Moody (Gram.)	Cor. High and East Merrimack Sts...	143	136	279	199	190	389	136	130	266	124	115	239	31	44	30	18	19	5	94	240	55	....	90
PRIMARIES.																								
Fayette St.....	Fayette St., bet. Chestnut and Everett	31	38	69	84	78	162	38	33	71	34	30	64	56	....	19	26	19	2	....	47	98	17	90
High St.....	High St., bet. Chestnut and Everett..	42	43	85	66	69	135	35	36	71	31	31	62	29	....	31	16	15	....	....	14	86	35	89
Pond St	Cor. High and Pond Sts.....	48	44	92	74	80	154	45	46	91	42	41	83	52	....	10	23	14	....	....	19	102	33	91
Sycamore St...	Sycamore St., below Shepard's Gard'n	12	6	18	19	16	35	12	8	20	11	7	18	3	....	5	1	9	1	2	6	24	3	90
	Totals for Primaries.....	121	125	246	224	227	451	118	115	233	107	102	209	137	....	60	65	48	2	....	80	286	85	90

SUMMARY OF THE ANNUAL RETURNS OF THE PUBLIC SCHOOLS — (CONCLUDED).

SCHOOL.	LOCATION.	Number of pupils belonging Dec. 18, 1891.				Whole No. of pupils on time books since Jan. 1, 1891.				Aver. No. of pupils belonging to school.				Average daily attendance.				No. entered, not received from any other public school.								No. under six years of age.				Per cent. of attendance.						
		Males.		Females.		Total.		Males.		Females.		Total.		Males.		Females.		Total.		Males.		Females.		Total.		Males.		Females.			Total.					
Paw. Sch. Dist.	Pawt'k't (Gm.). PRIMARIES.	86	95	181	121	120	241	85	84	169	78	156	18	35	9	14	11	4	68	109	23	....	92	....	92	....	92	....	92	....	92		
	Mammoth Rd .	80	54	134	113	93	206	74	51	125	68	115	66	....	13	31	10	....	....	20	149	37	93	....	37	93	....	37	93	....	37	93	
	Varnum Ave...	2	3	5	8	4	12	4	3	7	4	1	5	12	....	....	....	4	....	3	4	2	76	....	2	76	....	2	76	....	2	76	
	Totals for Primaries.....	80	54	134	113	93	206	74	51	125	68	115	66	....	13	31	10	....	....	20	149	37	92	....	37	92	....	37	92	....	37	92	
Var. Sch. Dist.	Varnum (Gm.). PRIMARIES.	229	214	443	342	298	640	231	200	431	211	185	336	49	94	33	23	32	14	202	399	39	....	93.5	....	93.5	....	93.5	....	93.5	....	93.5	
	Fourth St.....	17	29	46	41	63	104	15	25	40	14	23	37	39	....	12	22	14	....	1	16	72	15	93	....	15	93	....	15	93	....	15	93
	Lakeview Ave.	104	86	190	174	162	336	87	70	157	81	63	144	146	....	26	31	30	4	9	90	199	38	92.3	....	38	92.3	....	38	92.3	....	38	92.3
	Tenth St.....	88	81	169	131	142	273	83	84	167	75	75	150	49	....	33	45	17	2	....	45	218	10	90	....	10	90	....	10	90	....	10	90
Var. Sch. Dist.	W. Sixth St....	102	91	193	164	140	304	91	79	170	83	69	152	75	....	47	40	32	6	10	95	187	12	89	....	12	89	....	12	89	....	12	89
	Totals for Primaries.....	311	287	598	510	507	1017	276	258	534	253	230	483	309	....	118	138	83	12	20	246	676	75	91	....	75	91	....	75	91	....	75	91
	SUMMARY—High School.....	206	253	459	235	346	641	209	256	465	198	243	441	20	178		
	Grammar Schools.....	1842	1759	3601	2611	2419	5030	1764	1626	3390	1605	1479	3084	376	890	264	229	221	148	1253	3304	451	
Var. Sch. Dist.	Primary and Training Schools.....	2276	2117	4393	3856	3672	7528	2157	2095	4252	1962	1788	3750	309	28	118	138	83	12	20	246	676	75	91	....	75	91	....	75	91	....	75	91
	Mixed Schools.....	33	23	56	54	41	95	35	26	61	32	21	53	50	....	13	5	17	1	5	15	52	15	85	....	15	85	....	15	85	....	15	85
Totals		4357	4152	8509	6816	6478	13294	4165	4003	8168	3797	3531	7328	655	1096	395	372	321	161	1919	2571	1179	90	90

AUDITOR'S
FIFTY-SIXTH ANNUAL REPORT
OF THE
RECEIPTS AND EXPENDITURES
OF THE
CITY OF LOWELL, MASS.
TOGETHER WITH THE
TREASURER'S ACCOUNT AND THE ACCOUNT OF THE COMMISSIONERS
OF SINKING FUNDS, FOR THE FINANCIAL YEAR
ENDING DECEMBER 31, 1891.



LOWELL, MASS.:
MORNING MAIL PRINT, 147 CENTRAL STREET.
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, Jan. 19, 1892.

Received and ordered on file. Sent down for concurrence.

MICHAEL J. DOWD,

City Clerk.

IN COMMON COUNCIL, Jan. 19, 1892.

Received and ordered on file, in concurrence.

DAVID CHASE,

Clerk.

AUDITOR'S REPORT

OF THE

RECEIPTS AND EXPENDITURES

FOR THE YEAR ENDING DEC. 31, 1891.

AUDITOR'S REPORT.

CITY OF LOWELL,
AUDITOR'S OFFICE, Jan. 15, 1892.

TO THE CITY COUNCIL:

Gentlemen:—In conformity with the requirements of the ordinances of the City, I have the honor to present the Fifty-Sixth Annual Report of the Receipts and Expenditures of the City of Lowell, for the financial year ending Dec. 31, 1891, exhibiting the same as classified in the several Department Accounts, with a schedule of the Real and Personal Property belonging to the City, and a statement of the City Debt and Debts due the City.

RECEIPTS.

The whole amount of money received into the Treasury from all sources, from Jan. 1 to Dec. 31, 1891, was.....	\$2,894,341 54
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Of this amount there was received on
account of

Taxes of 1888.....	\$	79 17
Taxes of 1889.....		30,402 48
Taxes of 1890.....		93,495 45
Taxes of 1891.....		906,629 59
Schools.....		40,919 23
School-houses.....		81,507 91

Amount carried forward.....\$1,153,033 83

<i>Amount brought forward..</i>	\$1,153,033	83	
Roads and Bridges.....	23,574	36	
Reserved Fund.....	163,619	29	
Paupers.....	26,519	67	
Police.....	17,738	70	
Fire Department.....	28,311	85	
Sewers and Drains.....	57,463	98	
Commons.....	692	00	
Lighting.....	13	36	
Public Buildings.....	33,255	42	
Library.....	16,945	50	
Health.....	3,945	57	
Water Works.....	205,997	20	
New Pumping Engine.....	60,000	00	
Pawtucket Boulevard.....	25,101	00	
City Hall and Memorial Building.....	255,000	00	
State Aid.....	13,029	00	
Aid for Indigent Soldiers and Sailors..	4,254	00	
Interest.....	10,907	60	
City Debt.....	205,000	00	
National Bank Tax.....	4,697	58	
Temporary Loans.....	325,000	00	
Paving.....	25,000	00	
High School Building.....	150,000	00	
Fund for Ordinary City Debt.....	62,499	70	
Water Loan Sinking Fund.....	10,000	00	
City Hall and Memorial Building Sink- ing Fund.....	9,010	83	
High School Sinking Fund.....	3,731	10	
			<u>\$2,894,341 54</u>

EXPENDITURES.

The whole amount expended and order-
ed to be paid from the Treasury,
from Jan. to Dec. 31, 1891, was

\$2,695,157 24

The expenditures are charged to the
following appropriations or ac-
counts:

Schools.....	\$200,028	27
School-houses.....	69,243	66
Roads and Bridges.....	130,850	28
Reserve Fund.....	78,692	22
<i>Amount carried forward.....</i>	<u>\$478,814</u>	<u>43</u>

<i>Amount brought forward</i>	\$478,814 43
Paupers	77,955 71
Police	96,092 85
Fire Department	109,282 73
Sewers and Drains.....	77,055 49
Commons	11,785 81
Printing and Advertising.....	7,294 73
Lighting	55,876 50
Public Buildings.....	27,407 83
Library	17,307 86
Health.....	30,827 28
Water Works.....	180,250 56
New Pumping Engine.....	51,094 46
Extension of Palmer Street.....	7,274 00
Pawtucket Boulevard.....	25,130 08
Improvement in Andover Street Sewer System.....	2,458 78
Paving.....	26,311 84
High School Building.....	38,867 65
City Hall and Memorial Building....	183,671 34
Salaries.....	26,416 61
State Aid.....	14,483 75
Aid for Indigent Soldiers and Sailors.	8,217 00
Interest.....	87,033 96
City Debt.....	430,800 00
National Bank Tax	21,370 99
State Tax.....	47,694 29
County Tax.....	45,922 74
Abatement of Taxes.....	39,965 74
Temporary Loans.....	325,000 00
Fund for Ordinary City Debt.....	57,350 30
Water Loan Sinking Fund.....	26,000 00
Sinking Fund for High Service Water Supply.....	1,800 00
Sinking Fund for Loan of 1882.....	2,500 00
Aiken Street Sinking Fund.....	16,000 00
Sinking Fund for Buildings at City Farm.....	5,000 00
Central Bridge Sinking Fund.....	9,600 00
Intercepting Sewer Fund.....	5,000 00
City Hall and Memorial Building Sink- ing Fund.....	16,510 83
High School Sinking Fund.....	3,731 10
	<hr/>
	\$2,695.157 24
	<hr/>

The whole amount of receipts during the year 1891, was.....	\$2,894,341 54	
The whole amount of expenditures during the year 1891, was.....	2,695,157 24	
Excess of receipts over expenditures..		<u>\$199,184 30</u>
The balance in the Treasury, January 1, 1891, was.....	\$89,534 08	
The amount received into the Treas- ury, during the year 1891, was.	2,894,341 54	
Making a total of.....	\$2,983,875 62	
The amount paid from the Treasury, during the year 1891, was.....	2,695,157 24	
The balance in the Treasury, Dec. 31, 1891, was.....		<u>\$288,718 38</u>

CITY DEBT.

The amount of the City Debt, Jan. 1, 1891, was		\$2,894,000 00
The City Debt has been increased, during the year as follows:		
By the amount of two hundred and fifty-five \$1,000 City Hall and Memorial Building Bonds, sold to sundry persons, dated Oct. 1, 1890, payable in thirty years from date, with interest at the rate of four per cent. per annum, payable semi-annually	\$255,000 00	
By the amount of one hundred and fifty \$1,000 High School Build- ing Bonds, sold to sundry per- sons, dated April 1, 1891, pay- able in thirty years from date, with interest at the rate of four per cent. per annum, payable semi-annually.....	150,000 00	
<i>Amounts carried forward.....</i>	<u>\$405,000 00</u>	<u>\$2,894,000 00</u>

Amounts brought forward..... \$405,000 00 \$2,894,000 00

By the amount of two hundred \$1,000 Water Loan Bonds, sold to sundry persons, dated Novem- ber 1, 1890, payable in thirty years from date, with interest at the rate of four per cent. per annum, payable semi-annually.	200,000 00
By the amount of a note given to the Lowell Institution for Savings, dated March 9, 1891, payable one-tenth annually, with inter- est at the rate of four per cent. per annum, payable semi-an- nually	60,000 00
By the amount of a note given to the Lowell Institution for Sav- ings, dated May 16, 1891, pay- able one-tenth annually, with in- terest at the rate of four per cent. per annum, payable semi- annually	100,000 00
By the amount of a note given to the Lowell Institution for Savings, dated July 6, 1891, payable one- tenth annually, with interest at the rate of four per cent. per annum, payable semi-annually..	60,000 00
By the amount of a note given to the Lowell Institution for Savings, dated September 14, 1891, pay- able one-tenth annually, with in- terest at the rate of four per cent. per annum, payable semi- annually	47,000 00
By the amount of a note given to the Central Savings Bank, dated October 19, 1891, payable one- tenth annually, with interest at the rate of four per cent. per annum, payable semi-annually..	19,000 00
By the amount of a note given to the Lowell Institution for Savings, dated November 28, 1891, pay- able one-tenth annually, with in- terest at the rate of four per cent. per annum, payable semi- annually	55,000 00

Amounts carried forward..... \$946,000 00 \$2,894,000 00

Amounts brought forward..... \$946,000 00 \$2,894,000 00

By the amount of a note given to the
Commissioners of Sinking
Funds, dated December 23,
1891, payable one-tenth annu-
ally, with interest at the rate
of four per cent. per annum,
payable semi-annually..... 45,000 00

991,000 00

\$3,885,000 00

There have been paid on account of
the City Debt, during the year
1891, notes and bonds as fol-
lows:

To Sundry Persons (Water Bonds) ..	\$86,000 00	
To Sundry Persons (Sewer Bonds) ..	22,500 00	
To Lowell Institution for Savings...	251,800 00	
To Commissioners of Sinking Funds..	58,100 00	
Blake Bros. & Co.....	22,000 00	
To Essex Savings Bank.....	5,400 00	
To Salem Five Cent Savings Bank. .	5,000 00	
		430,800 00

The amount of the City Debt, Jan. 1,
1892..... \$3,454,200 00

Increase in the City Debt, during the
year 1891..... \$560,200 00

The amount of the City Debt, on ac-
count of the Water Works,
Jan. 1, 1891.....\$1,211,000 00

This has been increased during the
year by the amount of bonds
sold 200,000 00

By the amount of a note given to the
Lowell Institution for Savings. 60,000 00

\$1,471,000 00

There has been paid on account of
the same during the year 1891. 286,000 00

\$1,185,000 00

The amount of the Sinking Funds for
the reduction of the same, Jan.
1, 1892..... 82,622 11

Net City Debt on account of Water
Works, Jan. 1, 1892..... \$1,102,377 89

The amount of the Ordinary City Debt, Jan. 1, 1891.....	\$1,683,000 00	
This has been increased during the year 1891, by the amount of notes given.....	731,000 00	
	<u>\$3,414,000 00</u>	
There has been paid on account of the same during the year 1891.....	144,800 00	
	<u>\$2,269,200 00</u>	
The amount of the Sinking Funds, for the reduction of the same, Jan. 1, 1892.....	801,527 46	
Net Ordinary City Debt, Jan 1, 1892.		<u>\$1,467,672 54</u>
Total Net Debt of the City, Jan. 1, 1892		\$2,570,050 43
Total Net Debt of the City, Jan. 1, 1891		<u>2,160,768 59</u>
Increase in the Net Debt of the City, during the year 1891		<u>\$409,281 84</u>

Respectfully submitted,

DAVID CHASE,

Auditor of Accounts.

APPROPRIATIONS AND EXPENDITURES.

THE AMOUNT OF THE SEVERAL APPROPRIATIONS MADE BY THE CITY COUNCIL DURING THE YEAR — THE AMOUNT OF THE UNEXPENDED BALANCE OF 1890 — THE TRANSFERS FROM ONE APPROPRIATION TO ANOTHER — THE AMOUNT RECEIVED INTO THE TREASURY FROM ALL SOURCES — THE EXPENDITURES IN DETAIL UNDER EACH APPROPRIATION, AND THE UNDRAWN BALANCES, DEC. 31, 1891 — ALSO, THE AMOUNT OF THE CITY DEBT — DEBTS DUE THE CITY — SCHEDULES OF REAL AND PERSONAL PROPERTY, ETC.

SCHOOLS.

Appropriated and assessed in 1891.....	\$160,000 00	
	\$160,000 00	

RECEIPTS.

Received into the Treasury on account
of SCHOOLS:

From Appropriation for Lighting, for coal.....	\$	8 91
Appropriation for Health, for coal,		9 18
Nellie M. Brown, for overdraft...		57 00
Austin K. Chadwick, for dictionary		8 00
A. K. Whitcomb, for damage to books.....		5 14
Andrew G. Swapp, for globes....		1 00
Lowell Institution for Savings, on loan		40,000 00

The following persons for TUITION:

From Emma M. Bartlett.....		40 00
Annie R. Baker.....		60 00
Katherine F. Baker.....		30 00
Victor M. Cutter.....		30 00
George H. Connell.....		30 00
Laura J. Connell.....		20 00
Alice G. Connell.....		30 00
Fannie Chase		10 00
Sheldon E. Chase.....		30 00
William A. Chase.....		30 00
Bertie Cheney.....		18 00
Mr. Day.....		10 00
George F. Hagerman.....		60 00
James O'Leary.....		20 00
Edward H. Pickering.....		60 00

<i>Amounts carried forward</i>	\$40,567 23	\$160,000 00
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Amounts brought forward..... \$40,567 23 \$160,000 00

The following persons for TUITION:

From George B. Pillsbury.....	60 00	
Boyden H. Pillsbury.....	20 00	
Nellie G. Pickering.....	60 00	
Justus C. Richardson.....	30 00	
D. M. Richardson.....	10 00	
Lester G. Richardson.....	12 00	
Harry B. Sewell.....	60 00	
Edward W. Shay.....	20 00	
Joseph P. Varnum.....	20 00	
Hattie Woodworth.....	10 00	
Town of Dracut.....	50 00	
	<hr/>	40,919 23
		<hr/>
		<u>\$200,919 23</u>

EXPENDITURES.

Paid SUPERINTENDENT OF
PUBLIC SCHOOLS:

To George F. Lawton, salary.....	\$1,733 33	
A. K. Whitcomb, salary.....	866 67	
	<hr/>	\$2,600 00

Paid for INSTRUCTION:

HIGH SCHOOL.

To Frank F. Coburn, Principal.....	\$2,308 00	
Frank B. Sherburne.....	1,800 00	
Cyrus W. Irish.....	1,797 00	
George E. Worthen, Military In- structor	12 50	
Alexander Grieg, Jr., Military In- structor	225 00	
Mary A. Webster.....	800 00	
Marietta Melvin.....	700 00	
Elizabeth McDaniels.....	680 75	
Harriet C. Hovey.....	696 50	
Charlotte E. Draper.....	700 00	
Alice J. Chase.....	700 00	
Susie L. D. Watson.....	696 50	
	<hr/>	
<i>Amounts carried forward</i>	\$11,116 25	\$2,600 00

Amounts brought forward..... \$11,116 25 \$2,600 00

Paid for INSTRUCTION:

HIGH SCHOOL.

To Adelaide Baker.....	700 00	
Jennie L. Allen.....	700 00	
Maud Hadley.....	626 50	
Emma L. Bradley.....	597 25	
Gertrude A. Rodliff.....	620 00	
Marietta W. Cassidy.....	618 25	
Belle P. Miller.....	31 50	
Cyrus A. Durgin.....	31 50	
Emma M. Huntley.....	175 00	
	<hr/>	15,216 25

GRAMMAR SCHOOLS.

BARTLETT SCHOOL.

To Samuel Bement, Principal.....	\$1,790 00	
Mary B. Kent	600 00	
Abbie E. French.....	581 24	
Belle F. Batchelder.....	600 00	
Belle A. Prescott.....	600 00	
M. Ida Howe.....	600 00	
Frances M. Talbot.....	600 00	
Lola Cheney.....	600 00	
Amy L. Tucke.....	600 00	
Mary F. Foss	10 00	
Bertha M. Rowlandson.....	15 12	
Grace F. Ward.....	10 63	
	<hr/>	6,606 99

BUTLER SCHOOL.

To Cornelius F. Callahan, Principal....	\$1,800 00	
Albertie T. Lane.....	540 00	
Laura F. Howe.....	430 50	
Nellie F. Keefe.....	597 50	
Nellie F. Murphy.....	600 00	
Kate E. Kelly.....	593 75	
Delia T. Brady.....	600 00	
Mary L. McSorley.....	600 00	
Anastasia C. Corbett.....	290 62	
	<hr/>	
<i>Amounts carried forward</i>	\$6,052 37	\$24,423 24

<i>Amounts brought forward.....</i>	\$6,052 37	\$24,423 24
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Paid for INSTRUCTION:

BUTLER SCHOOL.

To Margaret T. McCarthy.....	470 00	
Mary I. Donlan.....	470 00	
Agnes L. Donoghue.....	600 00	
Jennie S. Noble.....	11 88	
Grace F. Ward.....	120 01	
Ada E. Hoole.	28 13	
Jennie Fay.....	32 75	
Addie B. Merrill.....	6 25	
Bertha M. Rowlandson.....	2 25	
Fanny Hardman.....	20 00	
	<hr/>	7,813 64

COLBURN SCHOOL.

To To George W. Howe, Principal....	\$1,080 00	
Elizabeth W. Frost.....	213 00	
Sarah J. Crosby.....	360 00	
Jennie Fay,.....	20 63	
Mary F. Ward.....	26 88	
Agnes T. Fay.....	62 50	
Helen M. Shean....	169 88	
Carrie E. Erskine.....	109 88	
Fannie Hardman.....	88 63	
Addie B. Merrill.....	68 13	
Katherine L. Walsh.....	32 50	
	<hr/>	2,232 03

EDSON SCHOOL.

To C. W. Burbank, Principal.....	\$1,800 00	
Frances M. Webster.....	600 00	
Mary L. Keith.....	432 38	
Nettie E. Carleton.....	120 00	
Anna A. Sargent.....	198 63	
Fanny A. Scripture.....	512 26	
Rosalie T. Burns.....	600 00	
Carrie Stone....	600 00	
Mary A. Balch.....	598 13	
Kate J. Hayes.....	596 25	
Margie F. Marren.....	582 50	
	<hr/>	
<i>Amounts carried forward.....</i>	\$6,640 15	\$34,468 91

Amounts brought forward..... \$6,640 15 \$34,468 91

Paid for INSTRUCTION:

EDSON SCHOOL.

To Alice B. Besse	126 24	
Helen M. Shean.....	183 50	
Catherine Kelly.....	2 50	
Carrie A. Paul.....	323 50	
Grace W. Balch.....	38 12	
Mary F. Ward.....	1 87	
Winnifred Kneeland.....	1 87	
Mary F. Foss.....	3 75	
Jennie T. Costello.....	4 37	
Delia J. Smith.....	2 50	
Grace Scribner.....	7 50	
Jennie Fay.....	20 00	
Bertha M. Rowlandson.....	211 61	
Addie B. Merrill.....	1 25	
Sarah J. Crosby..	240 00	
	<hr/>	7,808 73

GREEN SCHOOL.

To A. L. Bacheller, Principal.	\$1,800 00	
Ruth B. Bailey.....	597 50	
Clara A. Hannaford.....	596 88	
Lizzie A. Nolan.....	565 88	
Blanche E. Fay.....	597 50	
Kate F. Cassidy.....	598 75	
Ella J. Carleton.....	597 50	
Lena A. Gookin.....	596 88	
Kate F. McCarthy.....	540 00	
Carrie A. Miles.....	600 00	
Carrie E. Erskine.....	113 75	
Delia J. Smith.....	8 75	
Mary J. Carmichael.....	4 38	
Grace W. Balch.....	21 24	
Mary F. Ward.....	1 25	
Ada E. Hoole.....	3 75	
Susie J. Neilon.....	1 25	
Jennie Fay.....	165 37	
Winnifred M. Kneeland.....	1 25	
Lizzie F. Garra.....	3 12	
	<hr/>	7,415 00
<i>Amount carried forward</i>		<hr/> \$49,692 64

Amount brought forward..... \$49,692 64

Paid for INSTRUCTION:

HIGHLAND SCHOOL.

To Charles W. Morey, Principal.....	\$1,800 00	
Alice M. Clark.....	116 88	
Flora I. Moffitt	600 00	
Abbie F. Woodward.....	600 00	
Adelaide F. Bennett.....	575 64	
Luella A. Wardwell.....	600 00	
Ellen L. Floyd.....	600 00	
Fanny M. Clark.....	600 00	
Nellie M. Coburn.....	542 01	
Estelle L. Whitney.....	599 38	
Arville L. Reader.....	600 00	
Edith L. Monroe.....	597 50	
Hattie B. Frye.....	600 00	
Minnie C Gray.....	470 00	
Carrie M. Sprague.....	470 00	
Mary F. Foss.....	306 12	
Kate M. Usher.....	7 50	
Hattie F. Adams.....	16 87	
Jessie M. Rich.....	68 13	
Anna A. Burnham.....	31 88	
		9,801 91

MOODY SCHOOL.

To William S. Greene, Principal.....	\$1,800 00	
Alice M. Sanborn.....	192 13	
Mary E. Way.....	596 25	
Carrie F. Smith.....	548 01	
Mercena F. Whitehorn.....	600 00	
Laura J. Pinder	600 00	
Frances E. Hardman	595 62	
Frances E. Garity.....	599 38	
Elizabeth A. Balch.....	599 38	
Alice A. Masterson	1 25	
Katherine Kelly.....	63	
Elizabeth W. Frost ...	385 75	
Addie B. Merrill.....	6 25	
Bertha M. Rowlandson.....	5 62	
Ada E. Hoole.....	1 25	
<i>Amounts carried forward</i>	\$6,531 52	\$59,494 55

SCHOOLS.

21

Amounts brought forward..... \$6,531 52 \$59,494 55

Paid for INSTRUCTION:

MOODY SCHOOL.

To Grace Scribner.....	34 00	
Lizzie F. Garra.....	3 75	
Grace W. Balch.....	1 87	
Hattie F. Adams	1 25	
	<hr/>	6,572 39

PAWTUCKET SCHOOL.

To William P. Barry, Principal.....	\$1,800 00	
Celestia P. Chase.....	600 00	
Julia M. Healey.....	600 00	
Effie I. Marshall.....	600 00	
Lizzie F. Garra.....	31 24	
Addie B. Merrill.....	45 00	
Nellie McDonald.....	401 88	
Carrie M. Hart.....	93 00	
	<hr/>	4,171 12

VARNUM SCHOOL.

To A. K. Whitcomb, Principal.....	\$1,080 00	
George W. Howe, Principal.....	720 00	
Georgiana F. Vinton.....	600 00	
Harriet Bradley.....	600 00	
Minnie F. Wing.....	600 00	
Sarah A. Bradley.....	589 00	
Alice R. Keese.....	600 00	
Maria W. Roberts.....	571 00	
Lizzie A. Hart.....	600 00	
Rosa A. Dowd.....	600 00	
Julia Williams.....	598 75	
Lizzie C. Kennedy.....	600 00	
Grace Scribner.....	28 13	
Fanny Hardman.....	6 25	
Mary McSorley.....	2 50	
Delia J. Smith.....	288 13	
	<hr/>	8,083 76

Amount carried forward..... \$78,321 82

Amount brought forward..... \$78,321 82

Paid for INSTRUCTION:

PRIMARY SCHOOLS.

AGAWAM STREET.

To Mary McLaughlin.....	\$600 00	
Annie M. Lee.....	600 00	
Mary A. Fay.....	540 00	
Maud A. Jones.....	6 25	
Adelaide Crowley.....	61 88	
Margaret J. Connors.....	85 63	
	<hr/>	1,893 76

AMES STREET.

To Amanda M. Hadley.....	\$600 00	
Kate F. Murphy.....	600 00	
Mary E. Drew.....	576 87	
Lizzie M. Hadley.....	590 62	
Mary J. Carmichael.....	5 63	
Addie B. Merrill.....	23 13	
Grace F. Ward.....	3 75	
	<hr/>	2,400 00

CABOT STREET.

To Nellie T. Gilday.....	\$597 50	
Martha A. Neal.....	597 49	
Mary A. Murphy.....	598 12	
Abbie V. Wheeler.....	600 00	
Jennie T. Costello.....	2 50	
Mabel D. Nickerson.....	2 51	
Margaret Connors.....	42 50	
Malvina Lamere.....	4 37	
Addie B. Merrill.....	26 88	
Susie G. Neffon.....	63	
Ella E. Prescott.....	46 88	
Jennie S. Noble.....	1 25	
	<hr/>	2,520 63
<i>Amount carried forward</i>		\$85,136 21

Amount brought forward..... \$85,136 21

Paid for INSTRUCTION:

CARTER STREET.

To Belle T. Vinall.....	\$600 00	
Georgia A. Harnden.....	600 00	
Cornelia M. Davis.....	599 37	
Jennie Fay.....	67 50	
Grace Scribner.....	63	
	<hr/>	1,867 50

CENTRAL STREET.

To Eliza Cowley.....	\$595 00	
Charlotte McDaniels.....	585 01	
Kate J. Lawler.....	600 00	
Lilla J. Greenhalge.....	593 76	
Katherine Kelly.....	1 87	
Ada E. Hoole.....	5 00	
Anna L. Mead.....	3 12	
Mary J. Carmichael.....	11 25	
Jennie S. Noble.....	4 37	
Grace F. Ward.....	62	
	<hr/>	2,400 00

CHAPEL STREET.

To Kate E. McOwen.....	\$577 50	
Mary A. Farnham.....	600 00	
Margaret J. Conners.....	22 50	
	<hr/>	1,200 00

CHARLES STREET.

To Alice T. Owens.....	\$599 37	
Annie E. Slavin.....	596 25	
Ella E. Gardner.....	600 00	
Margaret J. King.....	447 76	
Lilla McEvoy.....	4 38	
	<hr/>	2,247 76

CHEEVER STREET.

To Ida J. Clarke.....	\$600 00	
Minnie F. Hill.....	240 00	
Katherine T. Lennon.....	546 25	
	<hr/>	
<i>Amounts carried forward</i>	\$1,386 25	\$92,851 47

<i>Amounts brought forward.....</i>	\$1,386 25	\$92,851 47
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Paid for INSTRUCTION:

CHEEVER STREET.

To Mary E. Meehan.....	\$447 75	
Grace Scribner.....	6 25	
Margaret J. Conners.....	18 75	
Lillian C. Wholey.....	28 75	
Martha Rogers.....	62	
Malvina Lamere.....	75 62	
Lyola McCann.....	1 25	
	<hr/>	1,965 24

COTTAGE STREET.

To Lucy F. Carlton.....	\$600 00	
Maggie A. Harrihan.....	600 00	
	<hr/>	1,200 00

CROSS STREET.

To Sarah E. Scales.....	\$600 00	
Ellen M. White.....	600 00	
Ethel G. Wheeler.....	540 00	
	<hr/>	1,740 00

DOVER STREET.

To Clara B. Horne.....	\$600 00	
Clementine H. Bowers.....	561 24	
Bertha Gardner.....	600 00	
Katherine Kelly.....	28 12	
Mabel D. Nickerson.....	67 50	
Grace Scribner.....	1 88	
	<hr/>	1,858 74

ELIOT STREET.

To Ellen A. Stillings.....	\$600 00	
Nellie T. O'Grady.....	600 00	
Winnifred Haggerty.....	549 74	
Ellen A. Corbett.....	595 00	
Jennie T. Costello.....	74 37	
Lillian C. Wholey.....	6 88	
	<hr/>	
<i>Amounts carried forward.....</i>	\$2,425 99	\$99,615 45

Amounts brought forward..... \$2,425 99 \$99,615 45

Paid for INSTRUCTION :

ELIOT STREET.

To Bertha M. Rowlandson.....	\$2 25	
Margaret J. Conners.....	1 25	
Susie G. Neilon.....	2 50	
Lyola McCann.....	75 62	
Mabel D. Nickerson.....	14 37	
	<hr/>	2,521 98

FAYETTE STREET.

To Nellie Kohawn.....	\$600 00	
Mary E. Smith.....	486 00	
Hattie F. Adams.....	42 50	
	<hr/>	1,128 50

FOURTH STREET.

To Helen M. Brown.....	\$600 00	
	<hr/>	600 00

FRANKLIN STREET.

To To Sarah C. Fiske.....	\$600 00	
Lizzie S. Lowe.....	590 00	
Marion J. Stevenson.....	600 00	
Kate G. Jones.....	600 00	
Elizabeth Worthley.....	336 87	
Alice B. Besse.....	1 12	
Ada E. Hoole.....	7 50	
	<hr/>	2,735 49

HIGH STREET.

To Lucretia A. Day.....	\$20 75	
Clara A. Emerson.....	595 75	
Adelaide Crowley.....	33 74	
Jennie Fay.....	20 00	
Katherine Kelly.....	2 50	
Cora M. Howe.....	301 00	
	<hr/>	973 74

Amount carried forward..... \$107,575 16

Amount brought forward..... \$107,575 16

Paid for INSTRUCTION:

HOWARD STREET.

To Ellen A. Bridge.....	\$600 00	
Marion E. Greene.....	600 00	
Minnie A. Wilson.....	600 00	
Jennie M. Bennett.....	600 00	
	<hr/>	2,400 00

KIRK STREET

To Eliza A. Davis.....	\$593 75	
Laura H. Palmer.....	593 75	
Adelaide Crowley.....	6 25	
Katherine Kelly.....	186 13	
Gertrude Allen.....	6 25	
	<hr/>	1,386 13

LAKEVIEW AVENUE.

To Marietta F. Crowley.....	\$586 25	
Hattie S. Simpson.....	600 00	
Margaret McCluskey.....	469 37	
Agnes T. Courtney.....	265 50	
Lilla McEvoy.....	26 88	
Lillian C. Wholey.....	6 25	
Agnes T. Fay.....	150 62	
Grace F. Ward.....	7 50	
Gertrude Allen.....	32 50	
	<hr/>	2,144 87

LONDON STREET.

To Lizzie R. Maguire.....	\$600 00	
Rose E. McVey.....	600 00	
Lillian C. Wholey.....	40 00	
Minnie F. Hill.....	359 38	
Addie B. Merrill.....	5 00	
Mary J. Carmichael.....	86 87	
	<hr/>	1,691 25

Amount carried forward..... \$115,197 41

Amount brought forward..... \$115,197 41

Paid for INSTRUCTION:

LYON STREET.

To Alice T. Lee.....	\$587 50	
Annabel Costello.....	376 01	
Mary J. McCarry.....	600 00	
Nellie A. Hunt.....	600 00	
Jennie T. Costello.....	110 38	
Adelaide Crowley.....	12 50	
Bertha M. Rowlandson.....	19 13	
	<hr/>	2,305 52

MAMMOTH ROAD.

To Ellen M. Holden.....	\$563 75	
Alice M. Batchelder.....	431 00	
Carrie M. Hart.....	310 50	
Malvina Lamere.....	20 62	
Lilla McEvoy.....	111 12	
Ellen M. Holden.....	83 13	
Mary F. Ward.....	88 13	
Lizzie F. Garra.....	18 75	
	<hr/>	1,627 00

MIDDLESEX VILLAGE

To Hattie F. Wakefield.....	\$540 00	
	<hr/>	540 00

MORRILL STREET.

To Ellen F. Coughlin.....	\$600 00	
Nellie M. Brown.....	322 75	
Lottie E. Brown.....	416 00	
Annie M. Courtney.....	600 00	
Ella M. Breen.....	28 12	
Mary J. Carmichael.....	20 63	
Alice A. Masterson.....	156 63	
Nettie A. Upton.....	2 50	
Adelaide Crowley.....	88 13	
Lillian C. Wholey.....	75 63	
	<hr/>	2,310 39

Amount carried forward..... \$121,980 32

Amount brought forward..... \$121,980 32

Paid for INSTRUCTION :

PLAIN STREET.

To Flora H. Sprague.....	\$600 00	
Nellie F. Davidson.....	355 11	
Cora M. Howe.....	57 49	
Laura E. Lee	457 50	
Lillian C. Wholey.....	11 25	
Grace F. Ward.....	2 50	
	<hr/>	1,483 85

POND STREET.

To Marietta Hill.....	\$600 00	
Lizzie A. Molloy.....	600 00	
	<hr/>	1,200 00

POWELL STREET.

To Viola A. Hamblett.....	\$589 37	
Carrie J. Bailey.....	599 37	
Ada E. Hoole.....	11 88	
	<hr/>	1,200 62

SCHOOL STREET.

To Fannie A. Hardy.....	\$470 00	
Maud A. Jones.....	226 77	
Hattie F. Adams.....	18 12	
	<hr/>	714 89

SYCAMORE STREET.

To Grace W. Balch.....	\$27 50	
Jennie T. Costello.....	1 25	
Bertha M. Rowlandson.....	45 62	
Alice B. Besse.....	315 00	
	<hr/>	389 37

TENTH STREET.

To Mary F. Beane.....	\$599 38	
Fannie H. Murphy.....	535 00	
Alice A. Holtham.....	600 00	
	<hr/>	
<i>Amounts carried forward</i>	\$1,734 38	\$126,969 05

Amounts brought forward..... \$1,734 38 \$126,969 05

Paid for INSTRUCTION:

TENTH STREET.

To	Ella A. Bailey.....	\$588 63	
	Lilla McEvoy.....	63	
	Mabel D. Nickerson.....	7 50	
	Mary F. Ward.....	4 38	
	Grace F. Ward.....	62	
		<hr/>	2,336 14

VARNUM AVENUE.

To	Annie M. Buckminster.....	\$135 00	
	Jennie S. Noble.....	73 75	
	Katherine Kelly.....	1 25	
	Alice A. Masterson.....	171 00	
		<hr/>	381 00

WEED STREET.

To	Mary B McGovern.....	\$598 75	
	Agnes M. Foley.....	600 00	
		<hr/>	1,198 75

WEST SIXTH STREET.

To	Stella J. Allen.....	\$591 25	
	Marion S. Keyes	600 00	
	Hattie A. Palmer.....	600 00	
	Lizzie F. Lamere.....	600 00	
	Addie B. Merrill.....	6 25	
	Mabel D. Nickerson.....	21 88	
	Grace Scribner.....	1 25	
		<hr/>	2,420 63

WORTHEN STREET.

To	Mary L. Hill.....	\$600 00	
	Esther V. Green.....	540 00	
	Mary J. Alger.....	600 00	
	Mary R. Marren.....	470 00	
		<hr/>	2,210 00

<i>Amount carried forward</i>		<hr/>	\$135,515 57
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Amount brought forward..... \$135,515 57

Paid for INSTRUCTION:

TRAINING SCHOOL.

To Julia M. Dewey.....	\$1,620 00
Emily H. Radcliffe.....	70 25
Alice M. Clarke.....	559 13
Katherine T. Keyes.....	772 13
Mabel W. Ewings.....	472 50
Nellie M. Davidson.....	15 00
Jennie Fay	15 00
Cora M. Howe.....	15 00
Helen M. Shean.....	15 00
Elizabeth Worthley.....	30 00
Mary E. Gearey.....	15 00
Nellie Hadley.....	15 00
Annie I. Mead.....	15 00
Mary McSorley.....	15 00
Alice A. Masterson.....	15 00
Bertha M. Rowlandson.....	15 00
Mary F. Foss.....	15 00
Gertrude Allen.....	85 00
Fanny Hardman.....	85 00
Nettie A. Upton.....	85 00
Jessie M. Rich....	85 00
Anna L Mead.	85 00
Mary E. Lane	85 00
Ella E. Prescott.....	85 00
Ada E. Hoole	85 00
Mabel D. Nickerson.....	85 00
Jennie S. Noble.....	85 00
Grace Scribner.....	85 00
Mary F. Ward.....	85 00
Grace F. Ward	85 00
Lillian C. Wholey.....	85 00
Hattie F. Adams.....	85 00
Ella M. Breen.....	85 00
Grace W. Balch.....	85 00
Mary W. Carter.....	10 00
Mary J. Carmichael	85 00
Margaret J. Conners.....	85 00
Jennie T. Costello.....	85 00
Adelaide Crowley.....	85 00
Carrie E. Erskine	85 00
Lizzie F. Garra	85 00

Amounts carried forward..... \$5,654 01 \$135,515 57

Amounts brought forward..... \$5,654 01 \$135,515 57

Paid for INSTRUCTION:

Maud A. Jones	\$85 00
Katherine Kelley.....	85 00
Malvina Lamere.....	85 00
Lilla McEvoy.....	85 00
Addie B. Merrill.....	85 00
Lyola McCann.....	75 00
Delia J. Smith.....	85 00
Carrie A. Paul.....	30 00
Anna Burnham.....	110 00
Alice C. Green.....	110 00
Mary M. Kearney.....	110 00
Winnifred M. Kneeland	110 00
Susie J. Neilon	110 00
Ellen J. Piper	110 00
Martha Rogers.....	110 00
Margaret M. Sparks.....	110 00
Kate M. Usher.....	110 00
Katherine L. Walsh.....	110 00
Agnes T. Fay.....	15 00
Alice I. Smith	40 00
Charlotte E. Balch.....	40 00
Lillian G. Smith.....	40 00
Lilla G. Coburn.....	40 00
Harriet B. Witherell.....	40 00
Annie E. Cutler.....	40 00
Mary E. Morgan.....	40 00
Mary J. Callahan.....	40 00
Augusta Cragin.. ..	40 00
Florence M. Churchill.....	30 00
Annie E. Donovan.....	40 00
Mary E. Gorman.....	40 00
Annie E. King	40 00
Elizabeth Morgan.....	40 00
Mary A. Meehan	40 00
Lena A. Penn	40 00
E. Belle Perham.. ..	40 00

8,054 01

TEACHER OF PENMANSHIP.

To Thomas M. Graves..... \$1,250 00

1,250 00

Amount carried forward.....

\$144,819 58

Amount brought forward..... \$144,819 58

Paid for INSTRUCTION :

TEACHER OF DRAWING.

To Olive E. Underhill.....	\$1,250 00	
	<u> </u>	1,250 00

TEACHER OF MUSIC.

To Walter E. Owen.....	\$1,250 00	
	<u> </u>	1,250 00

TEACHER OF SEWING.

To Ida J. Flint.....	\$740 00	740 00
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SUPERVISOR.

To John A. Smith.....	\$1,350 00	
	<u> </u>	1,350 00

TRUANT OFFICERS.

To Bickford Lang.....	\$849 99	
John F. Williams.....	849 99	
James Kelly.....	849 99	
	<u> </u>	2,549 97

Paid for BOOKS :

To American Book Co.....	\$1,605 29	
Warren P. Adams.....	37 34	
D. Appleton & Co.....	6 00	
Boston School Supply Co.....	347 31	
E. A. Burgess.....	8 00	
Effingham, Maynard & Co.....	58 00	
Ginn & Co.....	374 19	
D. C. Heath & Co	189 38	
W. E. Hiccox.....	1 35	
	<u> </u>	<u> </u>
<i>Amounts carried forward</i>	\$2,627 36	\$151,959 55

Amounts brought forward..... \$2,627 36 \$151,959 55

Paid for BOOKS :

To Lee & Sheppard.....	334 97	
Leach, Shewell & Sanborn.....	12 50	
Prang Educational Co.....	190 40	
Silver, Burdette & Co.....	33 34	
Thompson, Brown & Co.....	402 92	
E. W. Tallant.....	18 00	
University Publishing Co.....	202 50	
William Ware & Co.....	2,110 85	
	<hr/>	5,932 84

Paid for BLANK BOOKS, STA-
TIONERY, ETC.,

To Boston School Supply Co., for files, pointers, ink wells, pencils, etc.,	\$228 77	
Bacheller, Dumas & Co., for binding and repairing books.....	279 55	
Boston Bank Note and Lithograph- ing Co., for engraving di- plomas.....	100 00	
Holden Book Cover Co., for covers	264 78	
F. E. Johnson, for postal cards and printing.....	13 50	
George F. King & Merrill, for slates, pens, compasses, blank books, etc.....	193 70	
Thomas H. Lawler, for stationery...	1 00	
George S. Perry, for ink, pens, slates, pencils, baskets, mucilage, com- passes, etc.....	1,094 70	
Prang Educational Co., for drawing books.....	505 26	
G. C. Prince & Son, for blank book,	60	
A. Storrs & Bement Co., for paper...	48 55	
Thorp & Adams Manufacturing Co., for ink, blank books, paper, etc.....	134 13	
Taylor Bros., for envelopes.....	1 35	
Whiteall, Tatum & Co., for tubing, etc.....	9 36	
M. R. Warren, for paper.....	19 80	
	<hr/>	2,895 05
<i>Amount carried forward</i>		\$160,787 44

Amount brought forward..... \$160.787 44

Paid for FUEL.

To Appropriation for Roads and Bridges, for labor.....	\$146 52	
Appropriation for Reserved Fund, for coal.....	1,464 40	
Appropriation for Paupers, for wood,	848 45	
Connors Bros., for coal.....	531 00	
James A. Cawley, for coal.....	29 50	
Howard & Wilson, for coal ...	63 31	
Wm. E. Livingston, for coal.....	7,552 38	
	<hr/>	10,635 56

Paid for SUNDRIES:

To Appropriation for School houses, for labor and material.....	\$1,079 58	
Appropriation for Water Works, for water.....	1,540 51	
Appropriation for Water Works, for repairing meter.....	1 25	
Lowell Electric Light Corporation, for motor power.....	225 00	
Lowell Gas Light Co., for gas, and meter connections.....	165 90	
New England Telephone & Telegraph Co., for service.....	109 96	
Mark Holmes, Jr., & Son, for wood turning.....	1 00	
Charles E. Adams, for oil.....	28	
Bartlett & Dow, for snow shovel...	35	
Horace B. Shattuck, for ash cans, coal hods, snow shovels, etc....	26 57	
Frederick Taylor Co., for hose, nozzle, screws, scissors, thermometers, bells, etc.....	219 53	
O. E. Averill, for pokers.....	3 50	
H. R. Barker Manufacturing Co., for repairing pencil sharpeners.....	2 80	
T. Costello & Co., for ash cans, labor, etc.....	16 44	
Eastern Electric Light & Storage Battery Co., for gong, bell, pipe and labor.....	24 81	
	<hr/>	
<i>Amounts carried forward</i>	\$3,417 48	\$171,423 00

Amounts brought forward..... \$3,417 48 \$171,423 00

Paid for SUNDRIES:

To Eimer & Amend, for electrical machines.....	38 00	
W. A. Mack & Co., for mica, basin, zinc grates, drinking cups, repairing stoves. labor, etc.....	26 40	
William McLarney & Co., for repairing coal hod.....	25	
M. O'Flahavan, for repairing stoves,	37 34	
H. H. Wilder & Co., for bars and grate.....	1 50	
Samuel Young, for repairing electrical apparatus, etc.....	62 13	
C. Zimmer, for key.....	30	
J. J. Cluin. for Carney Medals, clock and repairing	72 00	
Durant & Rogers, for medals.....	25 00	
Harry Raynes, for silver plate.....	3 50	
Adams & Co., for shades, fixtures, and chairs.....	21 87	
Benner & Corey, for chairs.....	5 25	
Patrick Brady, for reseating chairs..	6 75	
A. L. Butman, for flag strap.....	2 00	
D. Crowley, for ribbon.....	6 00	
H. C. Church & Son, for frame, paper, etc.....	25 60	
Peter Davey, for chairs.....	15 00	
Educational Supply Co., for tubes, zines, burners, coppers, etc.....	25 22	
Josiah Gates & Sons, for belt hooks.	25	
Albert N. Harmon, for frames.....	4 50	
C. F. Hatch & Co., for cutting blot- ters	1 00	
Rose H. Jordan, for ribbon.....	11 40	
A. L. Kittredge & Co., for shades, fixtures, dusters, labor, etc.....	101 08	
Lamson & Pinder, for rulers.....	7 50	
J. Merrill & Son, for directory.....	2 00	
Merrimack Croquet Co., for dumb bells.....	15 00	
Manning & Leighton, for carpet, matting, etc	31 44	
Murphy, Leavens & Co., for brushes and dusters.....	139 66	

Amounts carried forward \$4,105 42 \$171,423 00

Amounts brought forward..... \$4,105 42 \$171,423 00

Paid for SUNDRIES:

To A. Monier, for pins, thread, cotton, needles	37 24
O'Donnell & Gilbride, for thread and cambric	20 22
Prang Educational Co., for cubes and spheres.....	33 00
A. V. Partridge, for posting notices, F. & E. Bailey & Co., for sulphur, splints. etc.....	9 00 69
Carleton & Hovey, for sulphur, chlo- ride lime, etc.....	14 24
C. B. Coburn & Co., for brooms, brushes, waste, etc.....	36 95
George T. Callahan, for waste.....	6 00
Donovan & Co., for bags and baskets, Ellingwood & Co., for elatol... ..	27 35 50 00
E. F. Hathaway, for lettering bass drum	3 50
C. A. Mitchell & Co., for blacking..	1 14
W. H. Spalding & Co., for paint, oil, etc.....	2 62
Simpson & Rowland, for soap, soap- ine, and matches.....	15 70
P. J. Smith, for cloth and waste....	10 17
Talbot Dyewood & Chemical Co., for filter paper, salamoniac, etc., American Orchestra, for services at High School Battalion Drill....	47 79 60 00
C. E. Austin, for repairing drum and rent of piano.....	24 65
Henry Dufresne, for repairing drums, Irvin A. Foote, for tuning and re- pairing pianos....	2 50 41 00
Germania Orchestra, for services at High School Graduating Exer- cises.....	64 00
Geo Gardner, for Kreoyer piano, stool, and cover.....	350 00
Patten & Co., for decorating Hunt- ington Hall for High School Graduating Exercises.....	20 00
D. L. Page Co., for lemonade at High School Battalion Drill.....	2 20

Amounts carried forward..... \$4,985 38 \$171,423 00

Amounts brought forward..... \$4,985 38 \$171,423 00

Paid for SUNDRIES:

To Frank E. Shaw, for entertainment of Germania Orchestra.....	16 00
T. M. Bolton, for leather case and gun slings.....	84 68
William Read & Sons, for slings, symbols, and sword knot.....	9 75
O. A. Richardson, for repairing rifles,	1 50
Alfred Barney, for services as census enumerator.....	137 70
George W. Clement, for services as census enumerator.....	95 75
John J. Devine, for services as cen- sus enumerator.....	155 75
John P. Farley, for services as cen- sus enumerator.....	79 50
August Guillelt, for services as in- terpreter.....	20 00
E. W. Griffin, for services as census enumerator.....	90 20
John A. Herrick, for services as cen- sus enumerator.....	105 10
Waldo F. Miles, for services as cen- sus enumerator.....	74 20
Frank F. Coburn, for expenses of High School Battalion to Lynn,	25 20
John A. O'Keefe, for dinner of High School Battalion at Lynn.....	74 80
Joseph T. Griffin, for distributing school reports.....	47 50
George F. Lawton, for books, medals, expressing, transportation, etc..	27 62
John A. Smith, for travelling ex- penses, postage, etc.....	80 00
John F. Williams, for travelling ex- penses.....	1 40
Mrs. W. E. Adams, for services as matron, Highland School.....	90 50
Lilla Ward, for services as matron, Pawtucket School.....	95 00
Forrest H. Peabody, for care of drill hall.....	14 00
Arthur Thurston, for care of drill hall,	21 00
Ida J. Flint, for sewing materials, ..	1 55

Amounts carried forward \$6,334 08 \$171,423 00

Amounts brought forward..... \$6,334 08 \$171,423 00

Paid for SUNDRIES:

To Chelmsford Street Free Baptist Society. for rent of vestry.....	50 00
Estate F. A. Hildreth, for rent of land	25 00
C. I. Hood, for rent of school-house, Eliot Street	200 00
Patrick F. Mellen, for rent of building on Sycamore Street, and services as janitor.....	325 00
Owners of Urban Block, for rent of Urban Hall.....	145 00
George A. Shufelt, for rent of land, Lincoln Street.....	25 00
Merrill & Cutler, for plans and specifications for new High School Building	25 00
Fred W. Stickney, for plans and specifications for new High School Building.....	75 00
Thomas F. Fay, for cleaning vaults..	54 00
Fred A. Fox, for cleaning vaults....	25 50
Cahill Bros., for shoeing horses.....	5 50
J. A. Dow, for veterinary dentistry,	2 00
H. F. Ebert, for harness, halter and pad.....	65 35
C. H. Hanson, for black mare.....	225 00
H. J. O'Dowd & Co., for whip, robe, and canopy top wagon.....	139 50
Thomas H. Keefe, for board of horse,	40 00
James A. Keyes, for carriage hire...	5 00
Bickford Lang, for use of horse....	75 00
Morse & Sparks, for carriage hire...	7 85
W. C. Burnett, for teaming.....	25 50
John Hanley, for teaming.....	1 00
Thomas Kerwin, for teaming.....	14 25
Daniel Lyons, for teaming.....	2 00
Daniel McCarthy, for teaming.....	17 00
O. F. Prentiss, for teaming.....	1 00
Henry M. Pierce, for teaming.....	4 50
M. Ross, for teaming.....	2 50
Redmond Welch, for teaming.....	5 50
George E. Stanley, for transportation.....	22 04

Amounts carried forward \$7,944 07 \$171.423 00

Amounts brought forward..... \$7,944 07 \$171,423 00

Paid for SUNDRIES:

To American Express Co., for transportation.....	37 30	
Boston & Lowell Express Co., for transportation	25	
Boston & Maine Railroad, Western Division, for transportation....	3 36	
Lovejoy Paul Express Co., for transportation.....	4 75	
New England Despatch Co., for transportation	18 75	
Northern Express Co., for transportation.....	5 45	
	<hr/>	8,013 93

EVENING SCHOOLS.

Paid for INSTRUCTION:

HIGH SCHOOL.

To Fred N. Wier, Principal.....	\$75 00	
Frank S. Clark, Principal.....	320 00	
Cyrus W. Irish.....	237 00	
Thomas M. Graves.....	148 00	
Clarence W. Whidden.....	156 00	
James F. Owens.....	148 00	
Charles H. McIntire.....	78 00	
Wm. A. Hogan.....	150 00	
Albert G. Smith.....	156 00	
G. H. Leon.....	70 00	
William A. Charles.....	78 00	
Cyrus A. Durgin.....	148 00	
Ezra B. Vining.....	32 00	
Charles Wier.....	4 00	
E. K. Baldwin.....	70 00	
F. Blanche Hard.....	250 00	
L. Belle Hard.....	60 00	
Jessie M. Rich.....	158 00	
Katherine S. Donovan.....	144 00	
Mary J. Mansfield.....	42 00	
Nellie A. Keyes.....	78 00	
	<hr/>	2,602 00
<i>Amount carried forward</i>		<hr/> \$182,038 93

Amount brought forward..... \$182,038 93

Paid for INSTRUCTION:

AIKEN AVENUE.

To Rebecca Gill, Principal.....	\$154 00	
Kate E. Cavanaugh.....	92 50	
Emma B. Colby.....	48 75	
Lizzie F. Garra.....	48 75	
Adelaide A. Sullivan.....	80 00	
Martha Rogers.....	91 25	
Belle P. Miller.....	33 75	
Sarah F. Boulger.....	43 75	
Marie A. Caisse.....	42 50	
Alice Geaney.....	42 50	
		<hr/> 677 75

BARTLETT SCHOOL.

To D. Emille Ross, Principal.....	\$156 00	
Louie E. Brown.....	48 75	
M. Belle Dodge	90 00	
Annie S. Cummings.....	92 50	
Mary J. Carmichael.....	92 50	
Mary F. Keyes.....	92 50	
Mary E. Lennon.....	92 50	
Annie H. Bedlow.....	48 75	
Olive Parthenais.....	48 75	
Josie T. Sullivan.....	92 50	
Jennie Fay.....	48 75	
Mary Walker.....	92 50	
Annie I. Mead	92 50	
Kate Gill.....	92 50	
Edith F. Fuzzard.....	92 50	
Gertrude A. Burns.....	48 75	
Emma B. Colby.....	43 75	
Nellie Chalifoux.....	43 75	
Katherine Kelly.....	43 75	
Mary A. Calvert.	43 75	
Amerilda Ross.....	48 75	
Maud E. Greene.....	43 75	
		<hr/> 1,589 75
<i>Amount carried forward</i>		<hr/> \$184,306 43

Amount brought forward..... \$184,306 43

Paid for INSTRUCTOR :

BUTLER SCHOOL.

To George P. Green, Principal.....	\$156 00	
Halva Lofgren.....	148 00	
Antonio Boroso.....	78 00	
Minnie Owens.....	92 50	
Mary A. Meehan.....	38 75	
Katherine Roark.....	10 00	
Lilla McEvoy.....	97 50	
Lizzie McLaughlin.....	48 75	
J. S. Campos.....	70 00	
Lillian C. Wholey.....	43 75	
Mary McMahan.....	28 75	
Nellie Rourke.....	43 75	
Martha Gildee.....	28 75	
Alice Brogan.....	43 75	
		928 25

COLBURN SCHOOL.

To James L. Mellen, Principal.....	\$156 00	
John H. McNabb.....	48 75	
Albert Benian.....	103 00	
Jessie M. Roviore.....	92 50	
Ada E. Hoole.....	48 75	
Mary J. Griffin.....	91 25	
Mary E. Gearey.....	92 50	
Mary Gallagher.....	33 75	
Esther H. Owens.....	42 50	
Katherine L. Walsh.....	31 25	
Annie Murphy.....	43 75	
Theresa Corbett.....	26 25	
Fannie Delaney.....	43 75	
Lizzie McLaughlin.....	43 75	
Margaret Cassidy.....	43 75	
Addie Garrahan.....	28 75	
Nellie O'Connell.....	43 75	
		1,014 00

EDSON SCHOOL.

To James J. Quinn, Principal.....	\$62 00	
Josie Garvey.....	38 75	
<i>Amounts carried forward</i>	\$100 75	\$186,248 68

Amounts brought forward..... \$100 75 \$186,248 68

Paid for INSTRUCTION :

EDSON SCHOOL.

To	Lizzie M. Allen.....	37 50	
	Tessie Keyes.....	37 50	
	Grace Marren.....	37 50	
	Emma Cushing.....	33 75	
		<hr/>	247 00

FRANKLIN SCHOOL.

To	Frank S. Clark, Principal.....	\$22 00	
	M. J. Donohue, Principal.....	134 00	
	John A. Gately.....	35 00	
	John J. Devine.....	43 75	
	Jennie S. Noble.....	92 50	
	Hattie F. Adams.	90 00	
	Ella E. Prescott.....	91 25	
	Nellie A. Keyes.....	48 75	
	Augusta Cregan.....	92 50	
	Malvina Lamere.....	92 50	
	Florence M. Churchill.....	81 25	
	Katherine Roarke.....	43 75	
	Maggie Harrington.....	16 25	
		<hr/>	883 50

GREEN SCHOOL.

To	Florence J. O'Donoghue, Principal..	\$214 50	
	August Guillette.....	90 00	
	Grace F. Ward.....	92 50	
	Katie F. Harrington.....	92 50	
	Annie G. Furlong.....	92 50	
	Nellie F. Davidson.....	91 25	
	Alice I. Smith.....	91 25	
	Annie McSorley.....	92 50	
	Mary F. Foss.....	23 75	
	Minnie T. Delaney.....	92 50	
	Grace W. Balch.....	91 25	
	Ellen F. Cummings.....	91 25	
	Adelaide Crowley.....	66 25	
		<hr/>	
	<i>Amounts carried forward</i>	\$1,222 00	\$187,379 18

Amounts brought forward..... \$1,222 00 \$187,379 18

Paid for INSTRUCTION:

GREEN SCHOOL.

Louisa I. Hickey.....	48 75	
Mary F. Sheehan.....	92 50	
Susie G. Neilon.....	92 50	
Minnie A. Danahy.....	92 50	
Margaret J. Connors.....	91 25	
Katie L. Gallagher.....	92 50	
Lizzie L. Welch.....	92 40	
Mary E. Donnelly.....	92 50	
Lucretia M. Corr.....	48 75	
Mary E. Meehan.....	6 25	
Agnes T. Courtney.....	6 25	
Ella M. Breen.....	92 50	
Nellie T. Gilroy.....	92 50	
Ellen J. Piper.....	43 75	
Annie I. Finnick.....	43 75	
Lizzie F. Leary.....	37 50	
Mary E. Courtney.....	41 25	
Mary M. Johnson.....	41 25	
Nellie V. Little.....	43 75	
Mary T. Wholey.....	38 75	
Kate F. Sullivan.....	26 25	
	<hr/>	2,479 50

MOODY SCHOOL.

To Josephine L. Fiske, Principal.....	\$158 00	
Kate F. Allen.....	93 75	
Emma J. Boire.....	98 75	
Susie G. Driscoll.....	73 75	
Mary A. Gorman.....	48 75	
Annie E. King.....	48 75	
Delia J. Smith.....	48 75	
Margaret Sparks.....	93 75	
Meta J. Fiske.....	53 75	
Lena Coburn.....	6 25	
Lizzie F. Garra.....	45 00	
Grace Scribner.....	45 00	
Sadie E. Huntoon.....	43 75	
	<hr/>	858 00

Amount carried forward..... \$190,716 68

Amount brought forward..... \$190,716 68

Paid for INSTRUCTION :

VARNUM SCHOOL.

To William B. Delaney, Principal.....	\$156 00	
Lizzie Lawler.....	48 75	
Annie I. Gibson.....	92 50	
Margaret Tancred.....	48 75	
Margaret J. King.....	48 75	
Margaret Garvey.....	28 75	
Rose E. Donnelly.....	43 75	
Esther H. Owens.....	43 75	
Mary Mellen.....	41 25	
Sarah Sparks.....	30 00	
	<hr/>	582 25

WORTHEN STREET.

To Clara L. Parsons, Principal.....	\$156 00	
Ida E. Bisbee.....	97 50	
Gertrude Allen.....	87 50	
Mary F. Ward.....	92 50	
Alice C. Green.....	92 50	
Alice A. Masterson.....	48 75	
Winnifred M. Kneeland.....	92 50	
Anna A. Burnham.....	43 75	
	<hr/>	711 00

Paid for SERVICES OF JANITORS :

To Warren N. Roberts.....	\$79 00	
Peter Kelly.....	78 00	
Omer Bedard.....	78 00	
Thomas Hannafin.....	86 25	
William Goodroe.....	74 00	
Patrick Donohue.....	78 00	
F. Danahy.....	74 00	
M. Finnegan.....	78 00	
James McCormack.....	77 00	
George A. Philbrick.....	78 00	
John A. Herrick.....	78 00	
	<hr/>	
<i>Amounts carried forward</i>	\$858 25	\$192,009 93

Amounts brought forward..... \$858 25 \$192,009 93

Paid for SERVICES OF JANITORS:

To G. W. Scrutton.....	39 00	
James F. Hurley.....	78 00	
Thomas H. Conley.....	78 00	
John Manchester.....	79 00	
James McNamara.....	79 00	
James Dwyer.....	74 00	
Patrick McGilley.....	78 00	
Michael Leonard	48 75	
Owen Gillogly.....	33 35	
John H. Condon.....	25 00	
	<hr/>	1,470 35

Paid for SUNDRIES:

To Lowell Electric Light Corp., for lights	\$73 30	
Lowell Gas Light Co., for gas.....	1,156 43	
H. R. Barker Mfg Co., for pipe, fittings and labor.....	21 86	
Farrell & Conaton, for pipe, fittings and labor.....	161 16	
Butterfield Printing and Binding Co., for postal cards	27 00	
F. Blanche Hard, for books.....	25 05	
Carleton & Hovey, for nitrate silver.....	1 00	
Frederick Taylor Co., for gong, bit, and brace.....	2 63	
C. E. Austin, for rent of piano.....	20 24	
T. M. Graves, for writing diplomas..	15 00	
M. W. Mansfield, for writing certificates.....	6 00	
Owen's Orchestra, for services at graduating exercises, Evening High School.....	18 00	
Patten & Co., for decorations at graduating exercises, Evening High School.....	15 00	
James A. Keyes, for carriage hire...	6 00	
	<hr/>	1,548 67
<i>Amount carried forward</i>		\$195,028 95

Amount brought forward..... \$195,028 95

DRAWING SCHOOLS.

Paid for INSTRUCTION :

To Kate Burrage.....	\$252 00	
Ellen D. Carney	420 00	
Isabella Coburn.....	252 00	
Mary E. Cushing.....	252 00	
Abby F. Davis.....	252 00	
Addie E. Edwards	90 00	
Ella C. Greene.....	228 00	
Martha A. Paul.....	138 00	
E. Lizzie Whitney.....	252 00	
Helen W. Wright.....	420 00	
Ida M. Wright.....	252 00	
J. Nelson Dennis	303 00	
Fred W. Farnham.....	258 00	
W. M. Foster	304 50	
Samuel G. Stephens.....	295 00	
Fred W. Stickney.....	294 00	
William H. Gerrish.....	15 00	
	<hr/>	4,277 50

Paid for SERVICES OF JANITORS :

To A. A. Laughton.....	\$55 00	
Hiram R. Blanchard.....	91 00	
	<hr/>	146 00

Paid for SUNDRIES :

To Appropriation for School-houses, for labor and material.....	\$21 12	
Lowell Electric Light Corp., for lights	232 89	
Lowell Gas Light Co., for gas.....	148 64	
C. B. Coburn & Co., for glue, paint, sponge and alcohol.....	4 00	
C. H. Denton & Co., for photos.....	7 50	
Paul A. Garey & Co., for studies....	3 00	
Stereo-Relief Decorative Co., for stereo-relief material.....	11 55	
W. H. Spalding & Co., for paper, ink, paint, tracing cloth, etc.....	3 97	
	<hr/>	
<i>Amounts carried forward</i>	\$432 67	\$199,452 45

<i>Amounts brought forward</i>	\$432 67	\$199,452 45
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Paid for SUNDRIES:

To W. W. Carey, for hangers, shafting, and pulleys	12 83	
Frederick Taylor Co., for wire, gong, broom, paper, etc	5 22	
Citizen Newspaper Co., for postals . .	2 00	
Montague Marks, for subscription Art Amateur	4 00	
Prang Educational Co., for vases . .	3 00	
Mary E. Cushing, for blank books, postal cards, and paper	1 10	
Ellen D. Carney, for postal cards . .	1 50	
S. G. Stephens, for prints and dia- grams	97 00	
Helen W. Wright, for cretone, stud- ies, and mounting studies	9 00	
A. A. Laughton, for labor on mod- elling clay	2 00	
John Foy, for labor on modelling clay	4 50	
O. F. Prentiss, for teaming	1 00	
	<hr/>	575 82
Total expenditure for the year 1891		\$200,028 27
Balance undrawn Dec. 31, 1891		890 96
		<hr/>
		\$200,919 23
		<hr/>

SCHOOL-HOUSES.

Appropriated and assessed in 1891.....	\$25,000 00	
	<hr/>	\$25,000 00

RECEIPTS.

Received into the Treasury on account
of SCHOOL-HOUSES:

From Appropriation for Schools, for la- bor and material.....	\$1,100 70	
Appropriation for High School Building, for labor and ma- terial.....	1,106 51	
Richard Bray, for sales of old lum- ber, iron, etc.....	162 70	
James Burns, for slate.....	33 00	
Daniel S. Kimball, for slate.....	40 00	
L. T. Montferrand, for old build- ing.....	65 60	
Central Savings Bank, on loan....	19,000 00	
Lowell Institution for Savings, on loan (Moody School).....	60,000 00	
	<hr/>	81,507 91
Transferred from Reserved Fund.....	\$601 03	
	<hr/>	601 03
		<hr/> <hr/>
		\$107,108 94

EXPENDITURES.

Paid for LUMBER, HARDWARE,
ETC.:

To Otis Allen & Son, for lumber.....	\$86 35
A. B. Adams, for chestnut posts....	50 00
A. P. Bateman, for sash, windows and lumber.....	63 64
A. L. Brooks & Co., for lumber.....	407 85
	<hr/>
<i>Amount carried forward.....</i>	\$607 84

Amount brought forward. \$607 84

Paid for LUMBER, HARDWARE,
ETC.:

To Burnham, Forrest & Davis, for lum- ber	200 79	
Burnham & Davis, for lumber	319 38	
Howe Bros. & Co., for lumber	263 32	
Mark Holmes, Jr., & Son, for lumber	5 00	
William Kelly & Son, for doors and windows	15 25	
Amasa Pratt & Co., for sash and lumber	317 90	
Sturtevant & Galer, rail	4 08	
Charles E. Adams, for hardware	37 54	
J. C. Bennett, for hardware	23 72	
Boutwell Bros., for iron	2 75	
Bartlett & Dow, for hardware	368 79	
H. B. Shattuck, for hardware	48 95	
Frederick Taylor Co., for hardware	47 88	
		<hr/>
		\$2,263 19

Paid for SUNDRIES:

To Sundry persons, for labor as per pay rolls	\$8,464 73	
Sundry persons, for services as jani- tors	17,211 71	
Appropriation for Roads and Bridges, for sidewalk assessment on Ames Street	79 23	
Appropriation for Roads and Bridges, for sidewalk assessment on Gor- ham Street	49 61	
Appropriation for Roads and Bridges, for sidewalk assessment on Var- num Street	54 52	
Appropriation for Roads and Bridges, for sidewalk assessment on Wil- der Street	173 87	
Appropriation for Sewers and Drains, for sewer assessment in Mam- moth Road	76 85	
Appropriation for Sewers and Drains, for privilege of entering sewer in Dummer Street	77 97	
		<hr/>
<i>Amounts carried forward.</i>	\$26,188 49	\$2,263 19

<i>Amounts brought forward.....</i>	\$26,188 49	\$2,263 19
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Paid for SUNDRIES:

To Appropriation for Water Works, for service pipe, waste cock, labor, etc	78 24
Lowell Gas Light Co., for meter connection.....	1 00
Lowell Electric Light Corp., for dam- age to wires.....	72 00
Western Union Telegraph Co., for telegrams	60
O. E. Averill, for blacksmithing.....	26 60
A. H. Abbott, for rakes and poker..	3 50
H. R. Barker Manufacturing Co., for pipe, fittings, solder, labor, etc..	243 27
T. Costello & Co., for pipe, fittings, lead, copper, packing, tin, labor, etc.,.....	2,686 51
W. W. Carey, for lathe, shaft, screws, etc.....	82 73
F. O. Decatur, for blacksmithing....	1 50
Eastern Electric Light and Storage Battery Co., for motor brushes..	1 00
Farrell & Conaton, for contract for plumbing at School-house, River Street.....	264 00
Farrell & Conaton, for pipe, fittings, labor, etc.....	1,894 96
S. H. Jones, for pipe, fittings, labor, etc.	730 53
Joel Knapp & Son, for rods, bolts, washers, etc.	6 79
A. I. Loughton, for labor.....	90
Lowell Steam Boiler Works, for cast- ings and labor.....	38 80
W. A. Mack & Co., for pipe, grates, shakers, labor, etc.....	112 14
Middlesex Machine Co., for pipes, fittings, brushes, etc.....	6 70
A. Parsons, for blacksmithing.....	1 25
Rice & Company, for window guards, wire cloth, etc.	10 46
Scannell & Wholey, for boiler at Edson School	445 00
Scannell & Wholey, for brush, scraper, inspecting boilers, etc.....	351 98

<i>Amounts carried forward.....</i>	<u>\$33,248 95</u>	<u>\$2,263 19</u>
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<i>Amounts brought forward.....</i>	\$33,248 95	\$2,263 19
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Paid for SUNDRIES:

To The "C. & C." Electric Motor Co., for repairing motor.....	17 50
C. Zimmer, for repairing locks.....	55
H. H. Wilder & Co., for ventilating pipe, grate, fittings, labor, etc...	916 62
Boston Disinfectant Co., for ozona- tors.	35 50
Fred M. Barney & Co., for oil.....	28
C. B. Coburn & Co., for oil, lantern, brushes, cord, glass, glue, etc...	53 68
Cheever & Russell, for oil.....	3 22
P. Dempsey & Co., for alcohol.....	106 72
A. L. Kittredge & Co., for shades...	26 40
Charles Morse, for stencils, black- boarding, etc.....	8 60
New England Ozonator Co., for ozone,	2 50
A. L. Ready & Son, for rags.....	77
W. H. Spalding & Co., for oil, tur- pentine, lead, paper, cord, labor, etc	540 36
J. W. Bennett & Co., for tarred paper	5 92
Bennett & Conlon, for mason work and material.....	8 10
S. D. Butterworth, for mason work and material.....	292 57
James Burns, for slating.....	40 95
Coburn & Crosby, for mason work and material.....	293 27
Connors Bros., for cement, lime, sand and teaming.....	82 30
H. E. Fletcher & Co., for filling....	8 00
Robert Goulding, for slate, zinc and labor	233 94
Philip Ginty, for slate, zinc and labor,	187 60
David W. O'Brien, for mason work and material	241 00
D. M. Prescott, for mason work and material.....	128 14
E. A. & A. T. Smith, for concrete..	322 49
Staples Bros., for drain pipe and labor,	43 40
Howard & Wilson, for brick.....	21 10
William E. Livingston, for kaolin, brick, lime, cement.....	95 60

<i>Amounts carried forward.....</i>	\$36,966 03	\$2,263 19
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<i>Amounts brought forward.....</i>	\$36,966 03	\$2,263 19
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Paid for SUNDRIES :

To John F. Murphy & Co., for brick and labor.....	131 14	
R. Taff & Co., for mason work and material.....	78 65	
A. Eaton & Sons, for moquette.....	63 88	
M. F. Gookin, for chairs and repairing furniture.....	46 41	
L. W. Hawkes & Co., for stove pipe, moquette, imitation leather, etc.	181 32	
Alvin Lawrence, for clock.....	8 00	
Whiting & Weston, for belting.....	84	
Luther Richards & Co., for moving building.....	525 00	
L. Grace, for damage to property by flowing water from Highland School.....	25 00	
Proprietors of Locks and Canals on Merrimack River, for rent of land on Cheever and Tucker Streets.....	1 00	
George T. Woodward, for board of horse.....	95 00	
Charles Clapp, for teaming.....	8 00	
P. H. Heelon, for board of horses...	68 69	
C. H. Hanson, for teaming.....	14 00	
D. J. Kelly, for teaming.....	75	
James Leach, for teaming.....	1 50	
Daniel McCarthy, for teaming.....	15 50	
James Nixon, for teaming.....	1 50	
E. A. Wood, for teaming.....	1 00	
	<hr/>	38,233 21

Paid for LAND AND CONSTRUCTION OF MOODY SCHOOL-HOUSE:

To Sundry persons, for labor as per pay rolls.....	\$21 25	
Appropriation for Roads and Bridges, for engineering.....	29 87	
Appropriation for Reserved Fund, for engineering.....	16 25	
	<hr/>	
<i>Amounts carried forward....</i>	\$67 37	\$40,496 40

<i>Amounts brought forward</i>	\$67 37	\$40,496 40
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Paid for LAND AND CONSTRUCTION OF MOODY SCHOOL-HOUSE:

To Appropriation for Water Works, for pipes, fittings and labor.....	28 75	
E. A. Smith and F. B. Shedd, Trustees, for 51,226 sq. ft. of land on High and Rogers Streets and Fort Hill Avenue, at 35c. per foot	17,929 10	
Fred W. Stickney, for plans and specifications	500 00	
P. O'Hearn, for foundation as per contract	3,510 60	
Burnham & Davis, for lumber.....	46 08	
Burnham, Forrest & Davis, for lumber	27 72	
Edward Cawley, for drain pipe	12 15	
William H. Wiggin, for meadow hay,	12 95	
	<hr/>	22,134 72

Paid for CONSTRUCTION OF TEMPORARY HIGH SCHOOL-HOUSE:

To Sundry persons, for labor as per pay rolls.....	\$619 08	
Appropriation for Roads and Bridges, for engineering	4 26	
Appropriation for Water Works, for service pipe and labor	4 15	
Ford & Phillips, for plans and specifications	210 00	
J. W. Bennett & Co., for labor and material per contract	3,900 00	
William E. Livingston, for lime, sand and cement	49 60	
John F. Murphy & Co., for setting boilers.....	98 77	
Michael F. McCarthy, for labor.....	5 00	
Coburn & Crosby, for blackboard...	47 55	
Edward Cawley, for drain pipe.....	16 11	
	<hr/>	
<i>Amounts carried forward</i>	\$4,954 52	\$62,631 12

<i>Amounts brought forward.....</i>	\$4,954 52	\$62,631 12
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Paid for CONSTRUCTION OF TEM-
HORARY HIGH SCHOOL-
HOUSE:

To H. R. Barker Manufacturing Co., for pipe, fittings, labor, etc.....	205 98	
T. Costello & Co., for wire, pipe, el- bows, ventilators, etc.....	169 62	
Farrell & Conaton, for heating ap- paratus.....	1,219 78	
Scannell & Wholey, for gaskets ...	75	
Amasa Pratt & Co., for lumber.....	36 97	
Rice & Co., for window guards.....	4 52	
W. H. Spalding & Co., for shellac.	40	
M. C. Handley, for teaming	1 50	
D. J. Kelley, for teaming.....	50	
Daniel McCarthy, fot teaming.....	4 00	
Redmond Welch, for teaming.....	14 00	
	<hr/>	6,612 54
Total expenditure for the year 1891.....		69,243 66
Balance undrawn (Moody School-house).....		37,865 28
		<hr/>
		\$107,108 94
		<hr/>

ROADS AND BRIDGES.

Appropriated and assessed in 1891	\$75,000 00	
	<hr/>	\$75,000 00

RECEIPTS.

Received into the Treasury on account
of Roads and Bridges:

Received for LABOR, MATERIAL,
ETC.:

From Appropriation for Schools, for labor and teaming coal	\$146 52	
Appropriation for School-houses, for labor and services of City Engineer and assistants	34 13	
Appropriation for Reserved Fund, for stone and labor	152 88	
Appropriation for Paupers, for labor, material and services of City Engineer and assistants . .	20 51	
Appropriation for Police, for labor,	25 00	
Appropriation for Fire Depart- ment, for labor	33 46	
Appropriation for Sewers and Drains, for labor, keeping horse, services of Superin- tendent of Streets, City En- gineer, etc	1,744 52	
Appropriation for Commons, for bolts and labor	62 45	
Appropriation for Lighting, for labor and lantern frames	7 99	
Appropriation for Public Build- ings, for labor and services of City Engineer and assistants . .	41 02	
<i>Amounts carried forward</i>	<hr/> \$2,268 48	<hr/> \$75,000 00

<i>Amounts brought forward.....</i>	\$2,268 48	\$75,000 00
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Received for LABOR, MATERIAL,
ETC.:

From Appropriation for Health, for labor and material.....	475 50	
Appropriation for Water Works, for labor and services of City Engineer and assistants.....	484 16	
Appropriation for New Pumping Engine, for labor and crushed stone.....	18 00	
Appropriation for Pawtucket Bou- levard, for labor and teaming..	460 75	
Appropriation for Paving, for stone, labor and teaming	2,486 68	
Appropriation for City Hall and Memorial Building, for ser- vices of City Engineer and assistants.....	34 17	
Appropriation for High School Building, for services of City Engineer and assistants.. ...	27 17	
Horace P. Beals, for sale of crushed stone, manure, old lumber, etc	1,223 20	
James W. Bennett, for labor.....	2 00	
Boston & Maine Railroad Corp., for edgestone and labor.....	13 48	
Joseph S. Brown, for manure....	4 00	
Boutwell Bros., for mixed scraps..	93 24	
Thomas H. Connell, for manure..	37 12	
County of Middlesex, for manure and labor.....	46 00	
John M. Dunphy, for manure ...	3 00	
Thomas Eliot, for manure	6 00	
E. L. Giles, for crushed stone	7 50	
E. S. Howe, for manure.....	42 00	
Michael Maguire, for rent of land on Tenth Street.....	15 00	
Middlesex Manufacturing Co., for for edgestone and labor	71 96	
J. J. McCarty, for edgestone, circle stone, and labor.....	6 82	
New England Telephone and Tel- egraph Co., for labor.....	9 25	

<i>Amounts carried forward.</i>	<u>\$7,835 48</u>	<u>\$75,000 00</u>
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Amounts brought forward..... \$7,835 48 \$75,000 00

Received for LABOR, MATERIAL,
ETC.:

From Patrick O'Hearn, for stone.....	20 00	
Proprietors of Locks and Canals on Merrimack River, for brick, edgestone and labor.....	702 26	
O. A. Simpson, for crushed stone and labor.....	24 83	
J. Smith Estate, for edgestone, circle stone, and labor.....	6 93	
F. B. Shedd, for edgestone and labor.....	31 01	
J. B. Trueworthy, for crushed stone.....	6 00	
White Bros. & Co., for labor.....	49 26	
W. H. White, for manure.....	4 00	
	<hr/>	8,679 77

Received for SIDEWALK ASSESS-
MENTS:

From Mary C. Colby, Andrews Street..	\$9 80	
Benj. F. Butler, Andrews Street..	59 38	
Est. John McEvoy, Andrews Street.....	32 50	
Appropriation for School-house, Ames Street.....	79 23	
Elizabeth G. Bass, B Street.....	27 00	
Philias David, Jr., B Street.....	39 51	
Joseph Vanasse, B Street.....	31 78	
F. D. Morrison, B Street.....	17 01	
George A. Monegan, B Street....	33 44	
Joseph Canton, B Street.....	39 15	
John L. Barnard, B Street.....	22 50	
George H. Vanvolkenburg, B Street.....	16 56	
Adolph T. Hanson, B Street.....	13 59	
James Gregory, B Street.....	59 12	
Adolphe T. Hanson, B Street....	29 97	
Mary M. Clarke, B. Street.....	55 48	
Mrs. Joseph P. Thompson, B Street.....	31 64	
Mrs. Joseph P. Thompson, B Street.....	22 77	
	<hr/>	<hr/>
<i>Amounts carried forward</i>	\$620 43	\$83,679 77

<i>Amounts brought forward</i>	\$620 43	\$83,679 77
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Received for SIDEWALK ASSESS-
MENTS:

From Laura A. Benner, Bridge Street..	36 36
Seth B. Hall, Bridge Street.....	95 94
Seth B. Hall, Bridge Street.....	105 25
Est. of J. M. G. Parker, Bridge Street.....	67 95
Est. of J. M. G. Parker, Bridge Street	92 74
Annie Weeks, Billings Street....	26 14
John Lennon, Bowers Street.....	86 44
Oakley E. D. Richardson, Bridge Street	31 12
Proprietors of Locks & Canals, Cheever Street.....	31 52
Proprietors of Locks & Canals, Cheever Street.....	21 50
Proprietors of Locks & Canals, Cheever Street.....	21 50
Proprietors of Locks & Canals, Cheever Street.....	28 05
Proprietors of Locks & Canals, Cheever Street.....	23 91
Proprietors of Locks & Canals, Cheever Street	15 05
Proprietors of Locks & Canals, Cheever Street.....	10 75
Proprietors of Locks & Canals, Cheever Street.....	10 75
Proprietors of Locks & Canals, Cheever Street.....	14 67
Proprietors of Locks & Canals, Cheever Street.....	24 25
Proprietors of Locks & Canals, Cheever Street.....	307 28
E. E. McLearn, Cumberland Road,	53 73
Seth B. Hall, Coburn Street.....	79 59
Est. Levi B. Hall, Coburn Street..	87 19
George A. Shufelt, Coburn Street,	39 25
I. S. Richardson, Coburn Street..	122 78
Albert Viles, Coburn Street.....	125 61
James Hennessy, Crosby Street..	12 64
Joanna F. Cummings, Crosby Street	16 34

<i>Amounts carried forward</i>	\$2,213 73	\$83,679 77
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Amounts brought forward..... \$2,213 73 \$83,679 77

Received for SIDEWALK ASSESS-
MENTS:

From Patrick Tighe, Crosby Street.....	7 94
John McMahon, Crosby Street...	5 36
Bridget Kearns, Crosby Street...	7 68
Dennis T. Regan, Crosby Street...	21 89
James H. McDermott, Crosby Street	20 71
Patrick Quigley, Crosby Street...	9 04
Patrick Quigley, Crosby Street...	13 45
James Kirane, Crosby Street.....	7 87
Michael Moran, Crosby Street....	11 63
Heirs of Michael Foley, Crosby Street	12 65
Adeline Blaisdell, Crosby Street..	7 71
George Applebee, Crosby Street..	6 65
Matthew Murtha, Crosby Street..	7 37
P. H. Brosnahan, Crosby Street..	13 38
Daniel J. Murphy, Crosby Street,	31 12
James H. McDermott, Crosby Street.....	16 07
Est. L. E. Sheppard, Crosby Street	9 23
Martin O'Dwyer, Crosby Street..	6 23
Martin O'Dwyer, Crosby Street..	27 55
Frank J. Donohue, Crosby Street,	21 47
John Wilson, Crosby Street.....	8 13
Hugh Riley, Crosby Street.....	7 68
William H. Bent, Crosby Street..	11 59
Robert Simpson, Crosby Street...	15 96
Daniel Mahoney, Crosby Street...	6 99
John Murtha, Crosby Street.....	8 21
Catherine Tully, Crosby Street...	6 50
Aaron Jacobs, Congress and Rob- inson Streets.....	31 12
Joseph F. Driscoll, Congress and Robinson Streets.....	22 46
Lowell Wadding & Paper Co., Congress and Robinson Streets	56 62
Jeremiah Ryan, Congress and Robinson Streets.....	24 60
Jane Howard, Congress and Rob- inson Streets.....	21 69

Amounts carried forward \$2,700 28 \$83,679 77

<i>Amounts brought forward.....</i>	\$2,700 28	\$83,679 77
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Received for SIDEWALK ASSESS-
MENTS:

From Thorndike Manufacturing Co., Congress and Robinson Streets.....	62 95
John C. Wilson, Congress and Robinson Streets.....	29 15
John C. Wilson, Congress and Robinson Streets.....	24 60
John C. Wilson, Congress and Robinson Streets.....	50 01
William Brown, Chester Street...	49 88
Charles E. Carter, Chester Street,	111 65
H. E. Favor, Chester Street.	33 75
S. H. Jones, Chester Street.....	75 47
Belvidere Woolen Manufacturing Co., Davidson Street.....	23 94
Daniel Floyd, Edson Street.....	45 55
Davis & Sargent, Edson Street...	21 38
Person Noyes, Edson Street.....	76 30
Bartlett & Dow, Edson Street....	35 19
Charles P. Perham, Edson Street.	31 05
F. T. Greenhalge, Edson Street..	20 21
Charles O. Davis, Edson Street...	22 50
Barth Scannell, Edson Street.....	52 45
John A. Hunt, Edson Street.....	52 80
Cora H. Clement, Eighteenth Street.....	23 00
Daniel P. Knowlton, Eighteenth Street.....	41 40
Marcena K. Tenney, Eighteenth Street.....	52 29
Albert E. Libby, Eighteenth Street	46 00
William R. Myers, Eighteenth Street	23 00
Albion Sweatt, Eighteenth Street	23 00
Mary D. Whiton, Eighteenth Street.....	23 00
Edwin H. Wentworth, Eighteenth Street.....	46 00
William G. Bumps, Eighteenth Street	38 06
Benjamin Hodgman, Eighteenth Street	69 00

<i>Amounts carried forward</i>	\$3,903 86	\$83,679 77
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Amounts brought forward..... \$3,903 86 \$83,679 77

Received for SIDEWALK ASSESS-
MENTS:

From Stephen C. Lane, Eighteenth Street.....	46 00
Hiram D. Wood, Eighteenth Street	52 25
Frank M. Jacques, Eighteenth Street	46 00
George B. Palmer, Eighteenth Street	46 00
Eliza C. Kennedy, Eighteenth Street	23 00
Sullivan Holman, Eighteenth Street	60 38
Birge C. Day, Eighteenth Street..	23 00
James B. Gilman, Eighteenth Street	46 00
William J. G. Myers, Eighteenth Street	23 00
John M. Kingsbury, Eighteenth Street	60 69
George T. Whitney, Eighteenth Street	23 00
Albion Sweatt, Eighteenth Street,	23 00
George F. Sturtevant, Foster Street	42 49
George F. Sturtevant, Foster Street	36 81
Otis D. Spofford, Foster Street...	33 72
Albert E. Dieth, Foster Street....	33 72
Mary P. Day, Foster Street.....	38 46
Otis D. Spofford, Foster Street...	105 89
Benjamin G. Brown, Foster Street,	33 72
Charles M. Clement, Foster Street,	37 09
James W. Bennett, Foster Street,	71 19
James W. Bennett, Foster Street,	33 72
James W. Bennett, Foster Street,	67 44
Trustees of Dartmouth College, Fletcher Street.....	58 06
Grace A. Nichols, Fletcher Street,	18 58
James W. Bennett, Fletcher Street,	33 21
Thomas Carolin, Fairmont Street,	85 95
Mrs. I. B. Piper, Fort Hill Avenue.....	13 73

Amounts carried forward..... \$5,119 96 \$83,679 77

Amounts brought forward..... \$5,119 96 \$83,679 77

Received for SIDEWALK ASSESS-
MENTS:

From Hattie A. Colby, Fort Hill Avenue,	10 98
E. A. Smith and F. B. Shedd,	
Fort Hill Avenue.....	13 73
Hiram N. Hall, Fort Hill Avenue,	13 72
Meldon S. Giles, Fulton Street...	8 44
Meldon S. Giles, Fulton Street...	14 78
Solomon H. Ladd, Gold Street...	31 79
George B. Sylvester, Gold Street,	32 69
Heirs of Thomas Nesmith, Gold	
Street	31 56
Avila Bourbonnierre, Gold Street,	18 51
John Callaghan, Gorham Street...	32 97
Appropriation for School-houses,	
Gorham Street.....	49 61
Josiah G. Morrison, Gorham Street,	19 53
John Doyle, Gorham Street.....	52 48
Patrick McKeon, Gorham Street,	13 50
Martin Maguire, Gorham Street,	52 02
Sarah Guthrie, Gorham Street ...	22 50
P. & F. Mollahan, Gorham Street,	22 68
Geo. F. Robinson, Gorham Street,	29 16
John Mountford, Gorham Street..	14 00
Lowell & Andover Railroad, Gor-	
ham Street.....	21 51
Mary Kelly, Gorham Street.....	33 53
Alice A. Leahy, Gorham Street ..	42 13
Michael Hannigan, Gorham Street,	32 31
Fred H. Parker, Gorham Street..	24 95
Michael Corbett, Gorham Street..	75 38
Michael Corbett, Gorham Street..	22 68
Patrick Guthrie, Gorham Street..	57 42
Appropriation for Public Buildings,	
Grand Street	147 41
Nancy E. Eaton, Grand Street...	46 95
Julia A. Butterfield, Grand Street,	123 67
Heirs Jemima Coburn, Grand	
Street.....	78 23
Chas. E. Jameson, Grand Street..	67 67
Chas. E. Jameson, Grand Street..	24 07
Chas. E. Jameson, Grand Street..	21 87
Minnie F. Bradt, Hale Street....	2 21
David Willman, Hale Street.....	30 29

Amounts carried forward..... \$6,456 89 \$83,679 77

<i>Amounts brought forward.....</i>	\$6,456 89	\$83,679 77
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Received for SIDEWALK ASSESS-
MENTS:

From Boston & Lowell Railroad, Hale Street	122 26
Boston & Lowell Railroad, Hale Street	23 71
Joseph Green, Hale Street.....	36 58
County of Middlesex, Hale Street,	248 11
County of Middlesex, Hale Street,	47 52
Edward Brelsford, Hale Street...	22 34
Scannell & Wholey, Hale Street..	23 18
Heirs Jemima Coburn, Hale Street,	52 00
Samuel Greenwood, Hale Street..	38 59
Samuel Greenwood, Hale Street..	15 50
Walter H. Bagshaw, Hale Street,	44 05
Frances M. Edwards, Hale Street,	74 93
Charles H. Conant, Huntington Street	19 57
Charles L. Knapp, Hanks Street..	46 33
James R. Fulton, Jewett Street..	18 14
John F. Merrill, Jewett Street...	22 50
Marcena K. Tenney, Jewett Street,	25 61
Achsah Burpee, Jewett Street....	22 32
Alex Hastings, Jewett Street....	22 23
James Wallace, Jewett Street....	98 18
John T. Smith, Jewett Street....	27 09
Harriet Roberge, Jewett Street..	18 18
Est. John B. Brown, Jewett Street,	22 50
Hibbert T. Bowen, Jewett Street,	18 00
Emma L. Shaw, Jewett Street...	22 50
John M. Richardson, Jewett Street.....	88 07
I. S. Richardson, Jewett Street...	35 14
I. S. Richardson, Jewett Street...	25 51
I. S. Richardson, Jewett Street...	16 92
I. S. Richardson, Jewett Street...	85 96
I. S. Richardson, Jewett Street...	18 68
I. S. Richardson, Jewett Street...	19 62
John T. Masterson, Jewett Street,	14 40
Lowell Co-Operative Milk Associa- tion, Jewett Street.....	117 08
Sarah Greenard, Jewett Street...	22 50
William Cathcart, Jewett Street..	14 58
John B. Hopkins, June Street....	21 33

<i>Amounts carried forward.....</i>	\$8,068 60	\$83,679 77
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<i>Amounts brought forward.....</i>	\$8,068 60	\$83,679 77
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Received for SIDEWALK ASSESS-
MENTS:

From Daniel S. Clark, Lawrence Street,	31 77
Heirs Peter Smith, Lawrence	
Street	28 20
L. W. Faulkner & Sons, Lawrence	
Street	48 96
L. W. Faulkner & Sons, Lawrence	
Street	59 78
L. W. Faulkner & Sons, Lawrence	
Street	66 81
Edward Dugdale, Lawrence	
Street	88 61
Mollahan Bros., Lawrence Street.	66 19
Thomas Maxwell, Lawrence	
Street	28 20
Jacques & Greenwood, Lawrence	
Street	32 76
Mary Jennings, Lawrence Street,	17 39
Dennis T. Finnegan, Lawrence	
Street	17 11
Greenwood Bros., Lawrence Street,	71 85
Greenwood Bros., Lawrence Street,	24 72
Greenwood Bros., Lawrence Street,	132 83
Greenwood Bros., Lawrence Street,	109 42
Wamesit Power Co, Lawrence	
Street	13 16
Wamesit Power Co., Lawrence	
Street	683 05
Est. Thomas Le Fevre, Lundberg	
Street	18 76
Margaret McKeon, Lundberg	
Street	20 40
John G. Stedman, Marlborough	
Street	79 80
John G. Stedman, Marlborough	
Street	25 20
Milo B. Stiles, Marlborough Street,	25 20
George R. Stedman, Marlborough	
Street	49 23
George W. Southwick, Mammoth	
Road.....	13 55
Frank O. Decatur, Mammoth	
Road.....	32 98

<i>Amounts carried forward</i>	<u>\$9,854 53</u>	<u>\$83,679 77</u>
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Amounts brought forward..... \$9,854 53 \$83,679 77

Received for SIDEWALK ASSESS-
MENTS:

From Abel Coburn, Mammoth Road....	25 56
Julia A. Coburn, Mammoth Road,	18 25
James W. Ellis, Mammoth Road,	20 71
Margaret Hickson, Mammoth Road	19 05
James B. Howell, Mammoth Road	19 71
Abram Bachelder, Mammoth Road	34 72
Est. J. M. G. Parker, Merrill Street.....	34 90
Davis & Sargent, Nichols Street..	63 30
Minnie F. Bradt, Nichols Street.	28 00
Holland Streeter, New School Street	39 71
George A. Clarry, New School Street	29 73
William S. Lamson, Nesmith Street	70 04
Mrs. John Hogan, Newhall Street,	19 44
Dennis F. Regan, Newhall Street,	61 23
Mrs. Charles McSorley, Newhall Street	20 10
Mrs. Alvin Beard, Pine Street...	37 95
James H. Buchanan, Pine Street,	23 82
Carrie E. Gilman, Pine Street....	25 90
Clarence N. Childs, Pine Street,	28 81
Samuel H. Merrill, Pine Street,	33 60
Charles E. Carter, Pine Street...	97 40
Ella F. Gardner, Pine Street.....	35 31
Ralph H. Goodhue, Pine Street..	33 91
Proprietors of Locks and Canals, Pawtucket Street	105 61
Proprietors of Locks & Canals, Pawtucket Street.....	109 65
Children of Josiah Gates, Royal Street.....	25 05
Children of Josiah Gates, Royal Street.....	59 00
Children of Josiah Gates, Royal Street....	25 00
Henry C. Brothers, Royal Street..	77 50
Emma Farmer, Royal Street.....	34 70
Henry H. Beard, Royal Street....	59 40

Amounts carried forward..... \$11,171 59 \$83,679 77

Amounts brought forward..... \$11,171 59 \$83,679 77

Received for SIDEWALK ASSESS-
MENTS:

From Emma and Ada Sanborn, Royal Street.....	38 73	
Joseph Evans, Royal Street.....	13 73	
Mrs. Valentine L. Wilson, Royal Street.....	31 79	
Mrs. Valentine L. Wilson, Royal Street.....	32 32	
Mary J. Mitchell, Royal Street...	30 98	
Dyer Hall, Royal Street.....	46 47	
Wm. J. Gilman, Royal Street....	38 73	
Charles Callahan, River Street...	22 86	
Gardner S. Gilman, South Hastings Street.....	39 75	
George T. Murkland, South Hastings Street.....	39 97	
Thomas F. Burgess, South Hastings Street.....	39 75	
Thomas F. Burgess, South Hastings Street.....	49 77	
Thomas F. Burgess, South Hastings Street.....	39 75	
Timothy Sullivan, South Whipple Street.....	9 27	
Albert W. Burnham, Seventh Avenue.....	73 50	
Albert W. Burnham, Seventh Avenue.....	50 00	
H. Vaillancour, Stanley Street...	16 52	
Chas. H. Conant, Sherman Street.	28 46	
William S. Lamson, Sherman Street	63 86	
Albert H. Wheeler, Sherman Street.....	104 88	
N. W. Norcross, Sherman Street,	56 54	
William Kelley, South Walker Street.....	35 00	
Rufus K. Green, South Walker Street.....	42 94	
Appropriation for School-houses, Varnum Street.....	54 52	
John Breen, Varnum Street.....	29 61	
William French, Varnum Street..	117 97	
<i>Amounts carried forward</i>	\$12,319 26	\$83,679 77

Amounts brought forward..... \$12,319 26 \$83,679 77

Received for SIDEWALK ASSESS-
MENTS :

From Estate Edward Tucke, Varnum Street.....	65 99
David Atwood, Varnum Street..	68 15
Frank C. French, Varnum Street,	22 32
Addie Coburn and Warren Fox, Varnum Street.....	20 87
Addie Coburn and Warren Fox, Varnum Street.....	20 02
Julia M. Bennett, Varnum Street,	20 91
Mrs. Artemas Dillingham, Varnum Street	47 00
Helen J. Bartlett, Varnum Street,	76 83
Achsah McAlvin, Varnum Street,	34 22
Charles A. Blodgett, Westford Street	18 84
James F. Puffer, West Sixth Street	21 58
Charles E. Carter, Wilder Street,	43 00
Appropriation for School-houses, Wilder Street.....	173 87
Joseph Evans, Wilder Street.....	43 00
James W. Bennett, Wilder Street,	54 63
Joseph Evans, Wilder Street.....	43 00
Alfred Bibeault, Wilder Street...	66 21
Millard F. Wood, Whitney Ave- nue.....	46 00
George T. Whitney, Whitney Avenue	92 00
George T. Whitney, Whitney Avenue	52 53
George T. Whitney, Whitney Avenue	20 65
Lizzie G. French, Whitney Ave- nue.....	69 15
George H. Stevens, Whitney Ave- nue.....	23 00
Calvin E. Porter, Whitney Ave- nue.....	46 00
George T. Whitney, Whitney Avenue	23 00
Benjamin Hodgman, Whitney Avenue	46 00

Amounts carried forward..... \$13,578 03 \$83,679 77

Amounts brought forward..... \$13,578 03 \$83,679 99

Received for SIDEWALK ASSESS-
MENTS:

From Sullivan Holman, Whitney Avenue,	46 14	
F. B. Shedd, West Ninth Street..	135 60	
F. B. Shedd, West Ninth Street..	97 89	
Mrs. James S. Hovey, Wachusett Street	72 13	
Boston & Maine Railroad, West- ern Avenue	517 30	
Boston & Maine Railroad, West- ern Avenue	447 50	
	<hr/>	14,894 59
Transferred from Reserved Fund		32,275 92
		<hr/>
		\$130,850 28
		<hr/>

EXPENDITURES.

Paid SUPERINTENDENT OF
STREETS AND CIVIL EN-
GINEER:

To Horace P. Beals, Superintendent, salary	\$1,800 00	
Geo. E. Evans, Civil Engineer, salary,	625 00	
Geo. Bowers, Civil Engineer, salary,	1,875 00	
	<hr/>	\$4,300 00

Paid Sundry persons for LABOR,
AS PER PAY ROLLS:

In January	\$9,783 74	
February	6,154 63	
March	5,654 93	
April	6,417 21	
May	8,086 21	
June	6,976 99	
July	7,173 64	
August	8,897 78	
September	6,602 15	
October	7,591 88	
November	6,415 44	
December	4,017 60	
	<hr/>	83,772 20
		<hr/>
<i>Amount carried forward</i>		\$88,072 20

Amount brought forward..... \$88,072 20

Paid for FUEL:

To Appropriation for Reserved Fund, for coal.....	\$102 54	
Appropriation for Paupers, for wood,	15 74	
D. W. Horne & Son, for coal.....	137 17	
William Kittredge Co., for coal....	39 33	
William E. Livingston, for coal....	606 85	
		<hr/>
		901 63

Paid for HAY, GRAIN, ETC.:

To Joseph Bowers, for hay.....	\$443 17	
W. W. Butler, for hay.....	43 25	
O. R. Blood, for hay.....	22 81	
J. B. Cover & Co., for oats and corn,	526 20	
Thomas H. Connell, for hay.....	172 98	
Fred A. Fox, for hay.....	128 34	
William P. Foye, for corn, oats, etc.,	284 25	
Thomas F. Fay, for hay.....	153 32	
E. S. Howe, for hay.....	220 10	
G. M. Foster, for straw.....	155 08	
George F. Falls, for hay.....	32 94	
C. H. Hanson, for straw.....	35 71	
William E. Livingston, for corn, oats, straw, etc.....	708 22	
T. J. McDonald, for corn, oats, straw, etc.....	745 34	
Joseph Miller, for corn, oats, meal, salt, etc.....	402 80	
Henry Peabody, for hay.....	165 51	
H. E. Parker, for hay.....	84 37	
G. A. H. Richardson, for hay.....	85 77	
L. K. Sprague, for hay.....	62 68	
E. S. Sherman & Co., for oats, corn, etc.....	537 13	
A. T. Simpson, for hay.....	26 50	
John Trull, for hay.....	106 92	
T. J. Underwood, for hay.....	329 68	
Thomas Varnum, for hay.....	615 96	
E. N. Wood & Co., for oats, corn, meal, etc.....	1,102 35	
O. D. Wilder, for oats, shorts, and meal.....	286 75	
		<hr/>
		7,478 13
<i>Amount carried forward</i>		<hr/>
		\$96,451 96

Amount brought forward..... \$96,451 96

Paid for LUMBER, STONE, BRICK,
CEMENT, ETC.:

To Otis Allen & Son, for sawdust.....	\$6 00	
Burnham, Forrest & Davis, for lum- ber	268 77	
Burnham & Davis, for lumber.....	1 73	
A. L. Brooks & Co., for lumber....	75	
A. P. Bateman, for lumber.....	238 75	
Mark Holmes, Jr. & Son, for lumber and labor.....	106 95	
Howe Bros. & Co, for lumber.....	395 55	
Amasa Pratt & Co, for lumber.....	84 57	
Chas. I. Taylor & Co., for table posts,	4 50	
Jesse N. Trull, for lumber.....	25 00	
Appropriation for Sewers and Drains, for brick.....	84 19	
G. W. Anderson, for brick.....	52 50	
F. W. Bennett, for stone and sand..	16 40	
Brown Bros. & Carlin, for edgestone and flagging.....	10,490 24	
Walter Brown, for paving blocks and flagging	716 29	
Edward Cawley, for pipe.....	1 00	
M. F. Downs, for flagging	339 94	
H. E. Fletcher & Co., for paving blocks	43 34	
Howard & Wilson, for brick and cement.....	14 00	
William E. Livingston, for brick, cement, lime and sand.....	105 88	
John Marinel, for flagging.....	713 85	
George Runels, for brick.....	20 40	
Charles Runels, for use of track....	11 70	
William Read, for stone.....	133 88	
Sweatt & Gould, for circle stone....	890 79	
E. A. & A. T. Smith, for concrete..	5,496 54	
Staples Bros., for pip.....	12 02	
		20,275 53

Paid for HARDWARE, TOOLS,
ETC.:

To Charles E. Adams, for hardware, and tools.....	\$35 07	
American Bolt Co., for bolts.....	1 00	
<i>Amounts carried forward</i>	\$36 07	\$116,727 49

Amounts brought forward..... \$36 07 \$116,727 49

Paid for HARDWARE, TOOLS,
ETC.:

To Bartlett & Dow, for hardware and tools.....	190 85	
J. C. Bennett, for hardware and tools.....	79 97	
Boutwell Bros., for iron, steel, tools, etc.....	630 84	
Callahan & Sanborn, for nails.....	2 15	
A. F. Nichols, for castings.....	10 59	
Phillips & Sanborn, for rasps.....	5 00	
George G. Spofford, for hammer handles.....	2 20	
H. B. Shattuck, for hardware and tools.....	43 07	
Salem File Works, for rasps.....	5 00	
Frederick Taylor Co., for hardware and tools.....	54 22	
	<hr/>	1,059 96

Paid for HORSES, CARRIAGES,
HARNESSES, ETC..

To Archibald Wheel Co., for wheels, axles, etc.....	119 57
Abbott Downing Co., for repairing street sweeper.....	6 00
Willard A. Brown, for thread, wax, blacking, etc.....	9 60
T. M. Bolton, for repairing harnesses.....	17 00
A. H. Cluer, for blankets, oil, etc....	33 10
Charles Clapp, for horses.....	550 00
H. F. Ebert, for repairing harnesses, etc.....	6 15
Fay Bros. & Hosford, for leather and tacks.....	1 35
Josiah Gates & Sons, for scrap leather.....	31 19
C. H. Hanson, for horses, exchange of horses, whips, blankets, etc...	928 50
Hill & Langtry, for leather, felt and harness trimmings.....	165 28
E. Newton, for painting wagon.....	13 00

Amounts carried forward..... \$1,880 74 \$117,787 45

Amounts brought forward..... \$1,880 74 \$117,787 45

Paid for HORSES, CARRIAGES,
HARNESSES, ETC.:

To Sawyer Carriage Co., for repairing carriages, etc.....	81 75	
Patrick Sullivan, for exchange of horses.....	200 00	
White Bros. & Co., for wool skins..	3 00	
	<hr/>	2,165 49

Paid for LAND, DAMAGES, ETC.:

To Est. of Thomas Curley, for 1,538 feet of land taken in laying out West Ninth Street.....	\$307 60	
Samuel Greenwood, for damage to fence on Hale Street.....	7 62	
George W. Haines, for land taken for extension of Laurel Street..	127 64	
Lowell Electric Light Corporation, for damage to lighting system..	40 00	
Edward D. McVey, for damage to property on Daly Street.....	150 00	
Phineas Whiting, for damage to post	90	
	<hr/>	633 76

Paid on account of JEFFERSON
STREET BRIDGE:

To Proprietors of Locks and Canals, for 4,000 sq. feet of land taken for extension of Jefferson Street...	\$1,550 00	
Sundry persons for labor as per pay rolls	940 51	
Brown Bros. & Carkin, for stone...	27 88	
William Read, for stone.	396 51	
Amasa Pratt & Co., for lumber....	7 64	
Charles Runels, for labor.....	30 00	
B. G. Brown, for teaming.....	91 50	
	<hr/>	* 3,044 04

Amount carried forward..... \$123,630 74

Amount brought forward..... \$123,630 74

Paid for SUNDRIES:

To Appropriation for Public Buildings, for paint and labor.....	\$3 20
Appropriation for Water Works, for water	196 90
Lowell Gas Light Co., for gas.....	263 34
N. E. Teleph. & Teleg. Co., for service	60 84
Buff & Berger, for repairing level- ling instrument.....	3 60
E. H. Bennett, for hose bands.....	1 50
H. R. Barker Manufacturing Co., for fittings, valves, packing, etc.,	19 57
T. Costello & Co., for stove, zinc, pipe and labor.....	38 90
W. W. Carey, for labor on rods....	2 52
C. J. Cheney, Jr., for hoisting ma- chine.....	25 00
Edson Manufacturing Co., for re- pairing street sweeper.....	221 60
Farrell & Conaton, for pipe and labor,	76
Farrell Foundry & Machine Co., for screen, plates, etc.....	281 14
Ariston Grover, for branding iron and stamps.....	10 25
Charles H. Hill, for sharpening picks,	40
William Knowles, for recutting file, etc.....	3 75
Joel Knapp & Son, for nut and labor.	35
Lowell Steam Boiler Works, for plates.....	3 00
Lowell Scale Co., for repairing scales	4 50
W. A. Mack & Co., for dippers, pails, tin, solder, etc....	6 65
William McLarney & Co., for solder and labor.....	50
A. Nourbourn, for repairing stone crusher.....	8 90
Nason B. Parsons, for filing saws...	18 61
James A. Ready, for repairing stone crusher.....	47 37
H. H. Wilder & Co., for solder.....	1 77
N. J. Wier & Co., for scoops.....	18 00
C. O. Arnold, for harness oil.....	2 00

Amounts carried forward..... \$1,244 92 \$123,630 74

Amounts brought forward..... \$1,244 92 \$123,630 74

Paid for SUNDRIES:

To F. J. Brown, for signs.....	2 40
Buttrick & Co., for salt.....	15
C. B. Coburn & Co., for oil, alcohol, varnish, lead, cord, etc.....	392 26
A. C. Daniels, for medicine	48 00
Donovan & Co., for dualin, forcite and exploders.....	184 00
Ellingwood & Co., for Elatol powder,	11 70
P. M. Jefferson & Co., for soap.....	9 00
A. L. Kittredge & Co., for painting surveyor's rods.....	2 00
William Nichols & Co., for powder, fuse, salt, etc.....	17 35
J. F. Puffer & Son, for lanterns, globes, wicks, buckets, etc.	33 09
Page Belting Co., for repairing belt, steel brooms, etc.....	8 59
Perrin. Seamans & Co., for explod- ing battery.....	25 00
J. B. Richardson & Sons, for ginger and candles.....	80
Geo. W. Roofs, for glass and labor..	1 80
Smith & Gould, for medicine.....	3 00
W. H. Spalding & Co., for ink, pens, etc.....	1 35
Spencer & Redmond, for signs.....	14 10
Spencer & Co., for sign.....	25
H. O. Stevenson, for medicine.....	4 80
Scollay & Rich, for polish	1 65
Talbot Dyewood and Chemical Co., for salts, potash, etc.....	7 13
White Mountain Axle Oil Co., for oil,	26 51
Daniel A. Brown, for broom material,	15 00
Cook, Taylor & Co., for cloth.....	3 50
E. Hapgood & Son, for hair	10 08
Lowell Felting Mills, for felt.....	2 80
Lowell Rubber Co., for duck and rubber	6 02
A. G. Pollard & Co., for ticking, etc.,	14 44
Quinlan & Washburn, for repairing horse cover.....	50
Bacheller, Dumas & Co., for blank books, etc.....	5 80

Amounts carried forward..... \$2,097 99 \$123,630 74

Amount brought forwards..... \$2,097 99 \$123,630 74

Paid for SUNDRIES:

To Baker Patent Telephone Index and Tablet Co., for combined index,	3 50	
H. C. Church & Son, for blank books and ink.....	7 73	
Frank Carolan, for blank books	3 00	
F. P. Coggeshall, for blank books...	80	
Emma F. K. Estes, for typewriting,	60	
Lyon Platinum Pen Co., for pens...	3 00	
Thos. H. Lawler, for pencils, ink, etc.,	8 25	
J. Merrill & Son, for pens, pencils, ink, blotters, etc.....	4 65	
Taylor Bros., for stationery, mucil- age, etc.....	8 10	
George Bowers, for repairing tapes, postage, etc.....	13 14	
George E. Evans, for postage.....	1 25	
William H. Harrigan, for postage, telegrams and laundering.....	4 14	
George G. Spofford, for hammer handles, medicine, etc.....	6 40	
John F. Sayers, for labor.....	66 00	
Thos. C. Lee, Agent, for insurance..	75 00	
A. W. Baker, for veterinary dentis- try	24 00	
W. A. Sherman, for professional services	13 50	
Robert Wood, for professional ser- vices	21 00	
Town of Dracut, for taxes of 1891,	25 25	
George B. Fuller, for removing ledge, Gorham Street.....	200 00	
Greenwood Bros, for overcharge for edgestones on Lawrence Street..	11 75	
William E. Livingstone, for sidewalk assessment on June Street, paid twice.....	43 63	
Stanton & Thurston, for sprinkling streets	15 00	
Morse & Sparks, for carriage hire...	28 50	
Murphy & Bingham, for carriage hire.....	32 00	
B. G. Brown, for teaming.....	585 50	
P. H. Charbonneau, for teaming....	293 00	

Amounts carried forward \$3,596 68 \$123,630 74

Amounts brought forward..... \$3,596 68 \$123,630 74

Paid for SUNDRIES:

To	Conners Bros., for teaming.....	\$ 42 00	
	Charles Clapp, for teaming.....	384 00	
	Edwin Duren, for teaming.....	46 00	
	Hutchins & Thurston, for teaming,	49 00	
	C. H. Hanson, for teaming.....	437 25	
	B. Lynch, for teaming.....	122 00	
	Joseph Miller, for teaming.....	118 00	
	George H. McNabb, for teaming...	351 75	
	B. Riley, for teaming.....	363 25	
	Zephirin Roux, for teaming.....	673 00	
	O. A. Simpson, for teaming.....	509 35	
	F. E. Stowell, for teaming.....	314 00	
	Louis Turgin, for teaming....	23 00	
	Redmond Welch, for teaming.....	150 00	
	American Express Co., for transpor-		
	tation.....	3 75	
	Lovejoy-Paul Express Co., for trans-		
	portation.....	90	
	New England Despatch Express Co,		
	for transportation.....	25	
	Boston & Maine Railroad, for trans-		
	portation.....	1 26	
	Boston & Maine Railroad, Lowell		
	System, for transportation.....	2 58	
	Boston & Maine Railroad, Western		
	Division, for transportation....	56	
	Boston & Maine Railroad, Southern		
	Division, for transportation....	30 96	
			7,219 54
			<hr/>
Total expenditures for the year 1891 ...			<hr/> \$130,850 28 <hr/>

PAVING.

RECEIPTS.

From Lowell Institution for Savings, on loan	\$25,000 00	
Transferred from Reserved Fund	1,311 84	
		<u>\$26,311 84</u>

EXPENDITURES.

Paid for SUNDRIES:

To Sundry persons, for labor as per pay rolls	\$5,121 59	
Appropriation for Roads and Bridges, for stone and labor	2,486 68	
Burnham & Davis, for lumber	3 60	
Bartlett & Dow, for tools	19 53	
J. C. Bennett, for hinges	50	
Perrin, Seamans & Co., for rammer,	8 00	
H. B. Shattuck, for tools	10 00	
C. B. Coburn & Co, for red chalk, oil, etc	6 55	
J. F. Puffer & Son, for buckets	67	
J. W. Bennett, for sand	1 40	
M. F. Downs, for paving blocks	13,159 57	
Henry Emery, for sand	11 05	
Miller & Luce, for paving blocks	4,555 70	
Joseph Miller for oat meal	13 50	
Frank Weaver, for sand	21 50	
B. G. Brown, for teaming	58 00	
Charles Clapp, for teaming	34 00	
Edwin Duren, for teaming	24 00	
C. H. Hanson, for teaming	4 00	
B. Lynch, for teaming	328 00	
George H. McNabb, for teaming ...	42 00	
Joseph Miller, for teaming	30 00	
Zephirin Roux, for teaming	10 00	
F. E. Stowell, for teaming	23 00	
Redmond Welch, for teaming	339 00	
Total expenditure for the year 1891		<u>26,311 84</u>

PALMER STREET.

Balance overdrawn Jan. 1, 1891.....	\$14,700 91	
	<hr/>	\$14,700 91
		<hr/>
Balance overdrawn Dec. 31, 1891.....	\$14,700 91	
	<hr/>	\$14,700 91
		<hr/>

EXTENSION OF PALMER STREET.

Balance undrawn, Jan. 1, 1891.....	\$72,324 67	
	<hr/>	\$72,324 67
		<hr/>

EXPENDITURES.

Paid for SUNDRIES:

To Jeremiah Crowley, for building.....	\$1,200 00	
Trustees, Estate James C. Ayer, for land	6,044 00	
Charles Runels, for services as ap- praiser	30 00	
	<hr/>	
Total expenditure for the year 1891.....		\$7,274 00
Balance undrawn, Dec. 31, 1891.....		65,050 67
		<hr/>
		\$72,324 67
		<hr/>

PAWTUCKET BOULEVARD.

Balance undrawn Jan. 1, 1891.....	\$72 29	
		\$72 29

RECEIPTS.

Received into the Treasury on account
of PAWTUCKET BOULE-
VARD:

From Lowell Institution of Savings, on loan.....	\$25,000 00	
Appropriation for Sewers and Drains, for tools.....	50 00	
H. P. Beals, from cash received for sale of grass.....	1 00	
George F. Falls, for grass.....	50 00	
		25,101 00
		\$25,173 29

EXPENDITURES.

Paid for SUNDRIES:

To Sundry persons, for labor as per pay rolls	\$12,650 14	
Appropriation for Roads and Bridges, for labor.....	271 75	
Appropriation for Roads and Bridges, for services of Engineer and assistants	189 00	
Appropriation for Paupers, for wood,	2 75	
Appropriation for Sewers and Drains, for freight on brick.....	17 76	
A. P. Bateman for lumber.....	8 98	
Mark Holmes, Jr., & Son, for lumber and labor.....	4 60	
<i>Amount carried forward</i>	<i>\$13,144 98</i>	

Amount brought forward..... \$13,144 98

Paid for SUNDRIES:

To Amasa Pratt & Co., for lumber.....	37 67
Charles E. Adams, for level glass and brass.....	39
Bartlett & Dow, for hardware, tools and seed.....	133 12
J. C. Bennett, for pails.....	1 00
Clarence G. Coburn, for tools.....	25 20
Callahan & Sanborn, for hardware...	1 58
H. B. Shattuck, for picks.....	10 00
Frederick Taylor Co., for tools.....	8 25
H. R. Barker Manufacturing Co., for fittings and cement.. ..	2 53
Nason B. Parsons, for filing saw....	17
H. E. Fletcher & Co., for stone.....	135 00
William E. Livingston, for cement..	33 75
Fidine Morrell, for brick.....	60 90
William Read, for stone.....	322 00
Boulger & McOsker, for rubber boots,	13 75
C. B. Coburn & Co., for oil, waste, packing twine, etc.....	7 13
Daniel Gage, for ice.....	27 80
William Kittredge Co., for coal.....	23 64
Joseph Miller, for oatmeal.....	18 75
J. F. Puffer & Son, for barrel covers and pails	85
H. W. Tarbell, for trees and labor..	262 00
Charles Clapp, for use of horse.....	4 50
Arthur Arsenault, for teaming.....	603 00
F. Albert, for teaming.....	130 00
B. G. Brown, for teaming.....	254 00
Jaques Boisvert, for teaming.....	16 00
A. H. Blake, for teaming.....	499 00
G. Bissell, for teaming.....	318 00
George A. Chase, for teaming.....	224 00
Thomas Carville, for teaming.....	2 00
E. Duren, for teaming.....	510 00
Thomas Doyle, for teaming.....	440 00
W. P. Foye, for teaming	40 00
George F. Falls, for teaming.....	657 00
A. H. Falls, for teaming.....	427 00
Charles A. Green, for teaming.....	432 00
Dolphis Garvais, for teaming.....	8 00
George Goodale, for teaming.....	112 00
C. H. Hanson, for teaming.....	757 62

Amount carried forward..... \$19,704 58

Amount brought forward..... \$19,704 56

Paid for SUNDRIES :

To Roger Hayes, for teaming.....	174 75
E. S. Howe, for teaming.....	557 00
D. H. Laporte, for teaming.....	470 00
Peter Latour, for teaming.....	421 00
B. Lynch, for teaming.....	31 50
Joseph Miller, for teaming.....	503 25
George H. McNabb, for teaming..	387 00
B. Riley, for teaming.....	890 00
Zephirin Roux, for teaming....	389 00
F. E. Stowell, for teaming.....	36 00
George Suttle, for teaming.....	97 75
O. A. Simpson, for teaming.....	16 00
Louis Turgin, for teaming.....	411 00
T. J. Underwood, for teaming.....	325 00
D. J. Williams, for teaming.....	311 25
Joseph Wilson, for teaming.....	405 00

Total expenditure for the year 1891..... \$25,130 08

Balance undrawn Dec. 31, 1891..... 43 21

\$25,173 29

RESERVED FUND.

Balance undrawn Jan. 1, 1891.....	\$3,435 64	
	<hr/>	\$3,435 64

RECEIPTS.

Received into the Treasury on account
of RESERVED FUND:

From Appropriation for Schools, for coal.....	\$1,464 40	
Appropriation for Roads and Bridges, for coal	102 54	
Appropriation for Police, for coal,	261 17	
Appropriation for Fire Department, for coal.	282 05	
Appropriation for School-houses, for engineering.....	16 25	
Appropriation for Public Buildings, for engineering....	20 51	
Appropriation for Water Works, for engineering.....	33 12	
Commonwealth of Massachusetts, for burial of Indigent Soldiers and Sailors	198 25	
Commonwealth of Massachusetts, for rent of armory	1,700 00	
Austin K. Chadwick, City Treasurer, for advertising, costs on warrants, etc.....	473 76	
Austin K. Chadwick, for liquor licenses.....	115,086 00	
Girard P. Dadman, City Clerk, for office fees and advertising....	95 20	
Michael J. Dowd, City Clerk, for office fees, etc.....	2,484 80	
	<hr/>	
<i>Amounts carried forward.....</i>	<i>\$122,218 05</i>	<i>\$3,435 64</i>

Amounts brought forward..... \$122,218 05 \$3,435 64

Received into the Treasury on account
of RESERVED FUND:

From George W. Fifield, for acknowl- edgment of paper	1 00
Carleton & Hovey, for rent of store,	1,200 00
J. Guillet, for rent of store.....	825 00
George R. Wheelock, for rent of store	75 00
N. E. Annis, for fees as sealer of weights and measures.....	401 00
James R. Fulton, for fees as sealer of weights and measures.....	52 64
Richard J. Noonan, for fees for weighing	347 28
Richard J. Noonan, for fees for measuring	140 20
Thomas O. Allen, for milk licenses and registers.....	141 50
F. A. Bates, for single graves at Edson Cemetery.....	138 00
M. V. Davis, for care of lots in Edson Cemetery	97 00
William W. Clark, for sale of hay and care of lots.....	146 95
George T. Woodward, for sale of old lumber	2 00
Cook, Taylor & Co., for overdraft,	22 92
Boston & Maine Railroad, for test- ing and sealing scales.....	1 75
Sundry persons, for rent of Hunt- ington and Jackson Halls....	2,359 00

The following persons for licenses
as hawkers:

Marks Caplan.....	25 00
Harris Carp	25 00
Abram L. Cohen.....	50 00
Harris Falk.....	25 00
David Fishstein	25 00
Abram Grosberg.....	25 00
Moses Hoolink.....	25 00
Moses Israel	25 00
Jacob Kaplan.....	25 00
Louis Ravin.....	25 00

Amounts carried forward..... \$128,444 29 \$3,435 64

Amounts brought forward..... \$128,444 29 \$3,435 64

Received into the Treasury on account
of RESERVED FUND:

From the following persons for licenses
as hawkers:

Harris Parivitsky.....	25 00
Philip Smith	25 00
Samuel Silberblate.....	25 00
Louis Starr.....	25 00
Barney Silberman.....	25 00
Sarren Silomy.....	25 00
Moses Wolf.....	25 00

Commissioners of Sinking Funds, on loan... ..	35,000 00	
	<hr/>	163,619 29
		<hr/>
		\$167,054 93
		<hr/>

EXPENDITURES.

Paid MEASURER OF WOOD AND
BARK AND SUPERINTEN-
DENT OF CITY SCALES:

To Richard J. Noonan, Measurer, salary,	\$600 00	
Richard J. Noonan, Superintendent, salary.....	200 00	
	<hr/>	\$800 00

Paid for services of CLERKS, JAN-
ITORS, ETC.:

To Hubert M. Potter, for services as clerk, for State Aid Committee,	\$1,014 00	
William P. McCarthy, for services as Assistant City Clerk.....	1,073 70	
Belle C. Hill, for services in City Clerk's Office.....	615 00	
Thomas P. Sullivan, for services in City Auditor's Office.....	777 64	
Andrew G. Stiles, for services in City Treasurer's Office.....	985 84	
Joseph Farrell, for services in City Treasurer's Office.....	583 46	
	<hr/>	
<i>Amounts carried forward</i>	\$5,049 64	\$800 00

<i>Amounts brought forward</i>	\$5,049 64	\$800 00
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Paid for services of CLERKS, JAN-
ITORS, ETC.:

To Stephen C. Gallagher, for services in City Treasurer's Office.....	107 36	
Ralph W. Foote, for services in City Treasurer's Office.....	410 00	
Emma B. Colby, for services in City Treasurer's Office.....	152 00	
Frank E. Dunbar, for services in City Treasurer's Office.....	85 00	
Albert S. Guild, for services in City Treasurer's Office.....	87 50	
Albert W. Mann, for examining the accounts of the City Treasurer,	126 50	

The following persons for services in
Office of Assessors of Taxes:

Stephen J. Kirby.....	1,404 00
William J. Reardon.....	936 00
James J. Kerwin.....	481 25
James T. Dunphy.....	316 25
Richard J. Sparks.....	242 50
J. Frank Burrill.....	300 00
William J. Leonard.....	287 50
Fred W. Coburn.....	205 00
Frank B. Hawes.....	42 00
Onesime G. Poilvert.....	5 00
Henry H. Carroll.....	42 00
Joseph Dextra.....	10 00
John J. Devine.....	66 00
Pierre C. Montmarquet..	5 00
Paul Vigeant.....	16 00
Hermes Duval.....	2 50
Joseph Roy.....	27 50

The following persons for services in
Office of Registrars of Voters:

Dennis J. Crowley.....	182 50
Henry H. Carroll.....	95 00
Frank B. Hawes.....	67 50
J. Frank Burrill.....	62 50
James T. Dunphy.....	65 00
Matthew H. Gilroy.....	52 50

Edward McNamara, for services as janitor at City Hall.....	58 00	
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<i>Amounts carried forward</i>	\$10,989 50	\$800 00
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<i>Amounts brought forward</i>	\$10,989 50	\$800 00
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Paid for services of CLERKS, JANITORS, ETC.:

To James Crowley, for services as janitor at City Hall.....	701 50	
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The following persons for labor at City Hall.

John McNamara.....	253 50
George Dutton.....	2 00
John Donohue.. ..	72 00
Michael Flynn.....	18 00
Frank Brady.....	6 00
John Fitzgerald.....	4 00
John J. Danahy.....	2 00
Kate Sullivan.....	559 00
Nellie Cunningham.....	325 80
Mrs. McAnanney	10 00

J. W. B. Shaw, for services as Probation Officer.....	200 00	
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13,143 30

Paid for services as WARD OFFICERS:

To Sundry persons, for services as Ward Officers, as per pay rolls,	\$2,864 00	
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2,864 00

Paid for FUEL:

To Appropriation for Roads and Bridges, for teaming coal.....	\$55 85	
Appropriation for Paupers, for wood,	39 86	
Howe Bros. & Co., for lumber for coal bin.....	54 28	
William E. Livingston, for coal.....	2,843 71	

2,993 70

Paid for DAMAGES, COSTS, ETC.:

To Appropriation for Roads and Bridges, for engineering.....	\$40 15	
Appropriation for Police, for services of Officer McDonald.....	948 75	

<i>Amounts carried forward</i>	\$988 90	\$19,801 00
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<i>Amounts brought forward.....</i>	\$988 90	\$19,801 00
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Paid for DAMAGES, COSTS, ETC.:

To John J. Hogan, for expenses in sundry cases.....	458 34
Larkin T. Trull, for expenses in sundry cases.....	215 09
J. Arthur Gage, for professional services	75 00
George F. Richardson, for professional services.....	600 00
F. C. Plunkett, for professional services	75 00
Isaac I. Doane, for services as stenographer	8 50
Frank N. Owen, for services as stenographer	52 75
F. E. Rollins, for services as stenographer and copyist.....	17 40
John W. Reed, for professional services	130 00
James Murphy, for attendance at court.....	5 00
John C. Woodward, for attendance at court.....	5 00
Lowell Institution for Savings, for one-half expense of reporting case in court	16 63
Wm. D. Martin, for serving notices,	6 10
H. W. Streeter, for serving notices,	9 00
Joseph Thompson, for copies of deeds, etc.....	18 15
Emma F. Estes, for typewriting....	3 85
Vox Populi Press, for printing.....	25 25
Sarah H. Bond, for personal injuries,	100 00
Mary A. Callahan, for personal injuries	100 00
Levi Milner, on execution.....	266 67
M. H. McCue, for serving summons and warrants	58 50
Dennis J. Crowley, for serving summons and warrants.....	25 00
Thomas B. Hustwick, for serving summons.....	103 75
Harrison W. Streeter, for serving summons.....	44 34

<i>Amounts carried forward.....</i>	\$3,408 22	\$19,801 00
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<i>Amounts brought forward</i>	\$3,408 22	\$19,801 00
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Paid for DAMAGES, COSTS, ETC.:

To J. B. Trueworthy, for serving sum- mons.....	17 00	
Albert S. Guild, for services as witness	3 50	
Vox Populi Press, for printing and advertising.....	54 50	
	<hr/>	3,483 22

Paid for SUNDRIES AT BURIAL
GROUNDS :

To M. V. Davis, Superintendent, for services	\$367 50	
William W. Clark, Superintendent, for services.....	540 00	
William W. Clark, Superintendent, for loan, postage, filing saw, etc.,	4 52	
Sundry persons, for labor, as per pay rolls	1,474 81	
Appropriation for Roads and Bridges, for bound stone and engineering,	22 00	
Appropriation for Public Build- ings, for lumber and labor.....	5 40	
Appropriation for Water Works, for water.....	94 95	
Burnham, Forrest & Davis, for lum- ber	4 56	
Burnham & Davis, for lumber.....	88	
Bartlett & Dow, for hardware, tools and bulbs	62 21	
Frederick Taylor Co., for lawn mower	8 00	
T. Costello & Co., for shaker.....	75	
S. H. Jones, for hose bands, nozzles, etc.....	85	
Joel Knapp & Son, for repairing lawn mower.....	3 10	
C. Zimmer, for keys and repairing locks.....	3 50	
William E. Livingston, for coal and lime.....	13 15	
D. W. Clement, for trees	21 25	
	<hr/>	
<i>Amounts carried forward</i>	\$2,627 43	\$23,284 22

Amounts brought forward..... \$2,627 43 \$23,284 22

Paid for SUNDRIES AT BURIAL
GROUNDS :

To C. B. Coburn & Co., for glue and brooms	3 10	
Goodyear Gossamer Co., for hose bands	36	
Lowell Bone Fertilizer Co., for bone meal	3 00	
J. Merrill & Son, for stationery, ink, etc	2 60	
B. P. Marshall, for gravel	7 75	
John S. Haynes, for plants	24 50	
John Oliver, for plants and shrubs ..	18 46	
E. Sheppard & Son, for plants	26 80	
Sarah E. Webster, for plants and shrubs	97 87	
James Harding, for labor	2 50	
George B. Fuller, for labor	86 00	
Daniel Donohoe, for use of horse ...	10 00	
	<hr/>	2,910 37

Paid for SUNDRIES AT HUNT-
INGTON HALL:

To Charles F. Going, for services as Janitor	\$140 00	
James H. Cahill, for services as Janitor	770 00	
Sundry persons, for labor, as per pay rolls	2,031 45	
Appropriation for Police, for services of officers	247 50	
Appropriation for Public Buildings, for labor and material	477 80	
A. L. Brooks & Co., for lumber	5 38	
Frederick Taylor Co., for hardware, Eastern Electric Light and Storage Battery Co., for labor	18 38	
W. A. Mack & Co., for grates, lifters, drinking cups, labor, etc	1 20	
Richard Bray, for freight on chairs ..	12 86	
Boston & Maine Railroad, for ground rent of hall	80	
	475 00	
	<hr/>	
<i>Amounts carried forward</i>	\$4,180 37	\$26,194 59

Amounts brought forward..... \$4,180 37 \$26,194 59

Paid for SUNDRIES AT HUNTINGTON HALL:

To H. C. Church & Son, for ink, mucilage, etc.....	1 50	
C. B. Coburn & Co., for duster, brooms, ammonia, etc.....	25 43	
Carleton & Hovey, for chalk and disinfectant.....	62	
Darius Whithed, for soap.....	30 50	
Andrews Manufacturing Co., for opera chairs.....	3 00	
Harwood Manufacturing Co., for assembly chairs.....	10 00	
Alvin Lawrence, for clock.....	8 00	
Manning & Leighton, for matting...	67 25	
Whiton & Knight, for diagrams of Huntington Hall.....	7 50	
Thomas H. Lawler, for diary.....	40	
W. H. Spalding & Co., for kalsomine, paper and labor.....	46 52	
Howard & Wilson, for coal.....	12 75	
E. A. Wilson, Agent, for coal.....	8 50	
Lowell Steam Carpet Cleaning Works, for cleaning carpets ...	2 88	
Patrick Hunt, for teaming.....	1 00	
Frank Meehan, for sawdust and teaming.....	1 50	
		4,407 72

Paid on account of MAPS AND CHARTS OF THE CITY:

To Sundry persons, for labor, as per pay rolls.....	\$3,773 38	
Appropriation for Roads and Bridges, for engineering.....	13 38	
Amasa Pratt & Co., for hubs.....	10 08	
Bartlett & Dow, for hatchet.....	90	
Frederick Taylor Co., for glue and hardware.....	1 08	
W. W. Carey, for labor on engineer's rods.....	4 68	
O. A. Richardson, for mending tapes,	5 35	
Lowell Institution for Savings, for rent.....	58 66	
<i>Amounts carried forward</i>	\$3,867 51	\$30,602 31

<i>Amounts brought forward.....</i>	\$3,867 51	\$30,602 31
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Paid on account of MAPS AND
CHARTS OF THE CITY:

To George Bowers, for horse car fare, mending tape, etc.	1 20	
W. M. Foster, for repairing tape....	75	
W. R. Harper, for repairing tape...	2 00	
C. B. Coburn & Co., for impression paper	15	
Carleton & Hovey, for soap.....	25	
A. L. Kittredge & Co., for ink, paper, rubber, labor, etc.....	18 78	
W. H. Spalding & Co., for ink and tracing cloth.....	22 57	
Taylor Bros., for blank books, stationery, etc.....	6 43	
	<hr/>	3,919 64

Paid for MEMORIAL DAY:

To Posts 42, 120 and 185, per resolution,	\$800 00	
	<hr/>	800 000

Paid for CELEBRATION OF THE
ONE HUNDRED FIFTEENTH
ANNIVERSARY OF AMERI-
CAN INDEPENDENCE:

To Sundry persons, for prizes in sports,	\$135 00	
John Cross, for use of tent.....	3 00	
T. Dwyer, for teaming.....	50	
Maurice Fitzgerald, for use of cleats, ropes and balls.....	5 00	
Mrs. Peter L. Gregoire, for badges..	3 00	
P. H. Heelon, for carriage hire.....	10 00	
John J. Sullivan, for expenses of Committee on Sports.....	3 50	
James K. Allen, for balloon as- cension	450 00	
Harrington Bros., for printing tickets,	4 00	
Lowell Gas Light Co., for labor, lay- ing and removing pipe.....	23 02	
Morse & Sparks, for carriage hire...	3 00	
Consolidated Fireworks Co., for fire- works exhibition.....	925 00	
	<hr/>	
<i>Amounts carried forward.....</i>	\$1,565 02	\$35,321 95

<i>Amounts brought forward</i>	\$1,565 02	\$35,321 95
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Paid for CELEBRATION OF THE
ONE HUNDRED FIFTEENTH
ANNIVERSARY OF AMERI-
CAN INDEPENDENCE:

To Daily News Job Print, for printing tickets to fireworks exhibition. .	5 00
James Gookin, for expenses of Com- mittee on Fireworks.....	19 80
G. E. Emerson, for children's enter- tainment.....	75 00
Daily News Job Print, for printing tickets to children's entertain- ment	15 00
F. E. Stowell, for carriage hire.....	6 00
Co. D, 2d Corps Cadets, for parade feature.....	25 00
Club Lavalle, for parade feature....	25 00
Division 8, A. O. H., for parade fea- ture	20 00
French Cadets, for parade feature...	18 00
French Societies, for parade feature,	300 00
Garde Salaberry, for parade feature,	60 00
Lowell Veteran Firemen's Associa- tion, for parade feature.....	20 00
Lowell Mechanics Phlanx, for par- ade feature.....	25 00
Lowell Reform Club, for parade fea- ture	75 00
Post 42, G. A. R., for parade feature,	40 00
Post 185, G. A. R., for parade feature,	40 00
Putnam Guards, for parade feature,	25 00
Pahner's Daughters, for parade fea- ture	60 00
South End Club, for parade feature,	80 00
The Farmers' Alliance, for parade feature.....	100 00
Woolen Spinners' Union, for parade feature	75 00
Welcome Club, for parade feature..	75 00
Welch Guards, for parade feature..	25 00
G. P. Dadman, for services and ex- penses as clerk of Committee on Parade.....	102 25

<i>Amounts carried forward</i>	<u>\$2,876 07</u>	<u>\$35,321 95</u>
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Amounts brought forward..... \$2,876 07 \$35,321 95

Paid for CELEBRATION OF THE
ONE HUNDRED FIFTEENTH
ANNIVERSARY OF AMERI-
CAN INDEPENDENCE:

To Est. F. A. Hildreth, for rent of room,	12 50
Henry Hoole, for expenses of Com- mittee to Boston	21 25
L. F. Howard & Co., for office sup- plies	8 80
C. H. Kimball, for batons, ribbon, etc.,	31 00
Lowell Gas Light Co., for gas	88
N. E. Telephone and Telegraph Co., for service....	5 00
F. E. Rollins, for typewriting.....	4 03
Taylor Bros., for stationery.....	2 05
Frank E. Shaw, for entertainment of Committee and Sherman Light Battery	74 20
H. F. Ebert, for use of equipments,	16 50
John I. Gibson, for use of horse and equipments	9 00
George F. Goode, for carriage hire,	10 00
P. H. Heelon, for carriage hire.....	32 00
C. H. Hanson, for carriage hire.....	6 00
Charles Laflamme, for use of horse and saddle.....	8 00
Murphy & Bingham, for carriage hire	12 00
John O'Connell, for carriage hire...	8 00
John J. Raggen, for carriage hire...	8 00
James Tryon, for bushes.....	3 00
Sherman Light Battery, for trans- portation and salutes.....	122 00
George F. Tilton, for expenses of Committee on Salutes.....	1 10
Boston & Maine Railroad, for trans- portation	32 00
Citizen Newspaper Co., for printing and advertising.....	10 50
Campbell & Hanscom, for printing and advertising.....	12 25
Critic Publishing Co., for printing and advertising.....	2 25

Amounts carried forward..... \$3,328 38 \$35,321 95

Amounts brought forward..... \$3,328 38 \$35,321 95

Paid for CELEBRATION OF THE
ONE HUNDRED FIFTEENTH
ANNIVERSARY OF AMERI-
CAN INDEPENDENCE:

To Daily News Co., for advertising....	6 00	
Daily News Job Print, for print- ing	42 75	
Lowell Sun, for advertising	7 50	
Benjamin Lenthier, for advertising..	6 00	
Lepine & Co., for advertising.....	4 50	
Marden & Rowell, for printing and advertising.....	5 50	
Morning Mail Co., for printing and advertising.....	9 25	
Sunday Arena, for advertising.....	2 25	
Vox Populi Press, for advertising... ..	4 75	
Acton Brass Band, for services.....	120 00	
Allen's Cornet Band, for services... ..	125 00	
C. M. C. A. Brass Band, for ser- vices	120 00	
Sixth Regiment Drum Corps, for services	54 00	
Tyngsboro Cornet Band, for ser- vices	80 00	
Tewksbury Cornet Band, for ser- vices	100 00	
W. G. Parkin, for expenses of Com- mittee on Music.....	6 00	
Lowell Opera House Bill Posting Co., for posting.....	10 60	
S. M. Patterson, for decorating City Hall	30 60	
George Green, for teaming	6 00	
John Hanley, for teaming.....	8 00	
W. E. Riggs, for teaming.....	4 00	
Redmond Welch, for teaming.....	10 00	
	<hr/>	4,090 48

Paid for LABOR DAY:

To Central Labor Union, as per resolu- tion	\$200 00	
	<hr/>	200 00
<i>Amount carried forward</i>		\$39,612 43

Amount brought forward..... \$39,612 43

Paid for ENTERTAINMENT OF
STATE FIREMEN'S ASSO-
CIATION:

To D. L. Page Co., for entertainment..	\$500 00	
	<hr/>	500 00

Paid for CONSTRUCTIONS OF
BUILDINGS AT RIFLE
RANGE:

To Appropriation for Public Buildings, for labor and material.....	\$485 28	
O. E. Averill, for blacksmithing....	3 20	
Bartlett & Dow, for hardware, etc..	11 98	
Connors Bros., for stone, sand, lime and cement.....	28 95	
William E. Livingston, for lime and cement.....	2 25	
Amasa Pratt & Co., for lumber.....	216 91	
	<hr/>	748 57

Paid for SUNDRIES:

To Appropriation for Roads and Bridges, for labor.....	\$21 50	
Appropriation for Police, for services of officers.....	4 13	
Appropriation for Public Buildings, for labor and material.....	484 19	
Appropriation for Water Works, for water.....	918 56	
Lowell Gas Light Co., for gas.....	1 87	
N. E. Telephone & Telegraph Co., for service.....	181 21	
Western Union Telegraph Co., for service.....	6 85	
Otis Allen & Son, for furniture for Milk Inspector's Office.....	54 65	
G. W. Bagley, for lumber and labor,	12 11	
A. L. Brooks & Co., for lumber....	28	
Burnham & Davis, for lumber.....	4 45	
Amasa Pratt & Co., for lumber.....	82	
J. C. Bennett, for ladder, hardware, etc.....	6 06	
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<i>Amounts carried forward</i>	\$1,696 68	\$40,861 00

<i>Amounts brought forward</i>	\$1,696 68	\$40,861 00
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Paid for SUNDRIES:

To Bartlett & Dow, for hardware and tools.....	13 40
Frederick Taylor Co., for hardware and tools.....	8 57
Warren T. Butler, for repairing ballot box.....	2 00
H. R. Barker Manufacturing Co., for burners.....	1 50
John Callaghan, for stove, pipe and shaker.....	7 73
T. Costello & Co., for pipe, fittings, labor, etc.....	114 55
W. A. Mack & Co., for stove, pipe and labor.....	14 07
H. H. Wilder & Co., for tin boxes, labor, etc.....	26 25
C. Zimmer, for key.....	15
Abels & Son, for towels.....	6 00
Adams & Co., for desks, stools, chairs, etc.....	56 15
W. T. Bradley, for rugs.....	9 00
Brown Bros., for shawl straps.....	40
John Cross, for repairing flags.....	1 50
A. Eaton & Son, for chairs and hassock.....	8 50
L. W. Hawks & Co., for carpets, linings, and labor, at Police Court Room.....	98 12
Lowell Steam Carpet Cleaning Works, for cleaning and repairing carpets.....	10 22
Manning & Leighton, for chairs and repairing furniture.....	15 95
Robertson & Co., for cuspidors.....	12 00
J. W. Bennett & Co., for tarred paper.....	54 81
Boulger & McOsker, for blacking and brushes.....	7 00
C. B. Coburn & Co, for tapers, pails, brooms, brushes, marline, baskets, etc.....	27 12
Carleton & Hovey, for paste, alcohol, bottles, brushes, and insect powder.....	10 30

<i>Amounts carried forward</i>	\$2,201 97	\$40,861 00
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<i>Amounts brought forward.....</i>	\$2,201 97	\$40,861 00
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Paid for SUNDRIES :

To Ellingwood & Co., for sponges, soap, etc.....	4 80
Daniel Gage, for ice	75 25
E. F. Hathaway, for signs.....	3 17
P. M. Jefferson & Co., for soap	24 00
A. L. Kittredge & Co., for shades, dusters, fixtures, labor, etc.	48 72
J. & J. M. Pearson, for matches..	3 45
W. H. Spalding & Co., for paper... ..	2 50
H. O. Stevenson, for brush and comb,	2 50
Harry S. Wallace, for soap and cam- phor balls	5 30
Spencer & Redmond, for lettering boxes.....	2 50
Jeremiah Crowley, for professional services	10 00
Bennett Davenport, for apparatus for Milk Inspector.....	175 00
Educational Supply Co., for appar- atus for Milk Inspector.....	115 62
Cyrus W. Irish, for analysis of milk,	10 00
Charles Littlefield & Co., for boxes..	1 75
F. A. Arlin, for refreshments.....	24 50
C. W. Cheney, for refreshments....	56 15
Merrimack House, for refreshments.	12 00
D. L. Page Co., for refreshments....	57 75
A. V. Partridge, for refreshments... ..	22 50
Frank E. Shaw, for refreshments... ..	58 50
Richardson's Hotel, for refreshments,	4 00
Waverley House, for refreshments,	84 25
American Book Co., for dictionary..	9 25
Bachelor, Dumas & Co., for blank books, binding, lettering, etc....	952 71
Byron Boyd, for reports.....	10 50
Butterfield Printing and Binding Co., for printing, etc.....	11 50
Butterfield & Co., for postal cards and stationery.....	22 05
T. S. Buck, for ink wells.....	2 85
Banker & Tradesman, for sub- scription.....	5 00
H. C. Church & Son, for stationery, etc.....	17 09

<i>Amounts carried forward</i>	\$4,037 13	\$40,861 00
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<i>Amounts brought forward</i>	\$4,037 13	\$40,861 00
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Paid for SUNDRIES:

To F. P. Coggeshall, for blank books, stationery, etc.....	14 25
Citizen Newspaper Co., for sub- scription, blank books and enve- lopes	15 00
Campbell & Hanscom, for subscrip- tions and blank books.....	17 50
Daily News Job Print, for blank books, envelopes and postals...	30 50
Lowell Daily Courier, for subscrip- tions.....	12 00
Morning Mail Co., for blank books; subscriptions.	26 00
Sampson, Murdock & Co., for direc- tories	11 00
Little, Brown & Co., for books.	9 15
Lyon Platinum Pen Co., for pens...	21 00
Thomas H. Lawler, for pens. erasers, stationery, etc.....	120 20
J. Merrill & Son, for directories, stationery, etc.....	146 15
G. C. Prince & Son, for envelopes and subscriptions.	22 91
Taylor Bros., for stationery, pens, etc.....	102 87
Vox Populi Press, for blank books, etc	17 50
Geo. H. Walker & Co , for Massachu- setts atlases.....	45 00
Wyckoff, Seamans & Benedict, for typewriter paper and repairing,	15 77
J. M. Fellows, for stamps.....	9 00
Goodyear Gossamer Co., for bands...	8 71
Albert N. Harmon, for frames.....	18 75
C. F. Hatch & Co , for boxes and re- pairing ballot boxes.....	136 45
George Leach, for repairing ballot boxes	5 00
F. Blanche Hard, for typewriting...	7 67
F. E. Rollins, for typewriting machines, and typewriting.....	188 39
Quinlan & Washburn, for rubber bands.....	2 50

<i>Amounts carried forward</i>	<u>\$5,040 40</u>	<u>\$40,861 00</u>
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Amounts brought forward... .. \$5,040 40 \$40,861 00

Paid for SUNDRIES :

To Harry Raynes, for gavel.....	15 00
Baker Telephone Index and Tablet Co., for telephone index.....	3 50
Lowell Rubber Co., for rubber bands,	60
J. L. Severance, for autograph stamps and pads.....	16 50
Boston & Maine Railroad, for mile- age book.....	20 00
A. Y. Caswell, for mileage book....	20 00
David Chase, for rent of Post Office box, postage, etc.....	16 50
Austin K. Chadwick, for postage, etc.....	258 09
G. P. Dadman, for postage and ex- pressage.....	1 50
M. J. Dowd, for office and travelling expenses.....	45 20
Henry Hoole, for expenses of com- mittees, postage, etc.....	294 85
L. Kileski, for services as clerk for Committee on Ordinances.....	200 00
S. J. Kirby, for pens, pencils, holders, erasers, etc.....	16 10
Charles H. McIntire, for travelling expenses.....	3 00
Nathan D. Pratt, for supplement to Massachusetts Statutes.....	3 10
Abel Wheeler, for expenses of Board of Assessors.....	17 00
Commonwealth of Massachusetts, for one-fourth receipts for liquor licenses.....	28,767 00
Railroad National Bank, for rent of safety deposit boxes.....	45 83
George Hedrick, for care of clock in High Street Church.....	50 00
Lowell Brass Band, for services....	27 00
Barnard & Stanwood, for services of attorney.....	100 00
Appleton National Bank, for rent of box in deposit vault.....	50 00
Boston & Maine Railroad, for rent of room for Armory.....	45 00

Amounts carried forward..... \$35,056 17 \$40,861 00

Amounts brought forward..... \$35,056 17 \$40,861 00

Paid for SUNDRIES:

To Cook, Taylor & Co., for rent of room for Armory.....	45 84
Est. F. A. Hildreth, for rent of room for Armory.....	58 34
Lowell Machine Shop, for rent of land for polling booth.....	25 00
Henry Hoole, for witness fee paid John Jackson.....	60
C. S. Lilley, for professional services,	150 00
F. E. Rollins, for services as stenog- rapher.....	691 77

Sundry persons, for services as jani-
tors of ward rooms, as follows:

John A. Brown.....	1 00
Thomas H. Conley.....	20 50
Thomas Hannafin.....	5 00
A. A. Laughton.....	16 00
David B. Mears.....	1 00
John F. Merrill.....	14 00
Frank O'Reilly.....	11 00
Thomas H. Rogers.....	3 00
Daniel Reynolds.....	4 00
W. N. Roberts.....	2 00
John F. Sparks.....	5 75
George Teel.....	10 00
Michael Walsh.....	16 00
James Wright.....	6 00
Edward Chevalier, for services as in- terpreter.....	5 90
Damase H. Laporte, for services as interpreter.....	12 00
Edward Daignault, for services as interpreter.....	6 25
Dennis J. Crowley, for services as census enumerator.....	25 40
Peter Hayden, for services as census enumerator.....	20 70
Charles C. Hartwell, for services as census enumerator.....	62 30
Michael H. McCue, for services as census enumerator.....	45 70

<i>Amounts carried forward</i>	<u>\$36,321 22</u>	<u>\$40,861 00</u>
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<i>Amounts brought forward.....</i>	\$36,321 22	\$40,861 00
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Paid for-SUNDRIES :

To James J. Quinn, for services as census enumerator.....	28 30
William W. Read, for services as census enumerator.....	21 80

Sundry persons, for reporting births, as follows :

Solon Bartlett.....	3 00
O. J. Comtois.....	1 75
H. A. Chaput.....	5 00
C. A. Daly.....	18 25
J. A. Gagnon.....	4 00
A. E. Gillard.....	1 75
James W. Grady.....	5 75
A. A. Gellineau.....	17 75
Guy Holbrook.....	14 00
W. A. Johnson.....	1 25
William H. Lathrop.....	20 25
A. W. Lavigne.....	18 50
Catherine Loftus.....	7 25
William P. Lawler.....	29 00
A. & R. Mignault.....	44 75
Catherine Shanley.....	20 50
James F. Sullivan.....	25 75
L. E. Schiller.....	3 25
J. W. Brooks, for burial of Simeon Eaton, Albert C. Lang, and William S. Leighton.....	105 00
C. T. Chamberlin, for burial of John W. Abbott, S. A. Hathaway, and John L. Powers.....	105 00
James A. Keyes, for burial of Michael Clark.....	35 00
James F. O'Donnell, for burial of Martin Clark, Patrick Goulding, Thomas Hoey, George Hughes, Thomas McNabb, Timothy Nolan, and Michael Sullivan.....	245 00
Charlie M. Young, for burial of Newton C. Dodge.....	35 00
John A. Weinbeck, for burial of George F. Anthony and William Hazzard.....	70 00

<i>Amounts carried forward.....</i>	\$37,208 07	\$40,861 00
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Amounts brought forward..... \$37,208 07 \$40,861 00

Paid for SUNDRIES:

Stanton & Thurston, for watering street.....	13 50
Chase & Hunton, for carriage hire..	11 50
P. H. Heelon, for carriage hire.....	25 00
James H. Keyes, for carriage hire...	20 00
Lowell Standard Cab and Hack Co., for carriage hire.....	5 00
Morse & Sparks, for carriage hire...	250 30
Murphy & Bingham, for carriage hire	39 50
Standard Cab Co., for carriage hire.....	4 00
James F. O'Donnell, for carriage hire	9 00
F. E. Stowell, for carriage hire.....	2 00

Sundry persons for teaming as follows:

A. W. Heald.....	5 00
Daniel J. Kelly.....	51 00
D. P. Knowlton.....	5 50
Thomas Kerwin.....	6 00
Frank S. Ladd.....	3 00
Daniel Lyons.....	18 50
Thomas G. Little.....	6 00
J. W. McDonald.....	4 50
Daniel McCarthy.....	54 75
James Nixon.....	3 00
Monroe Ross.....	1 00
William Roberts.....	13 00
E. E. Stoughton.....	52 50
Samuel Tompkins.....	6 00
Redmond Welch.....	50
American Express Co., for transportation.....	12 25
Lovejoy-Paul Express Co., for transportation.....	15
New England Despatch Express Co., for transportation.....	70

37,831 22

Total expenditure for the year 1891.....

\$78,692 22

Amount carried forward.....

\$78,692 22

Amount brought forward..... \$78,692 22

TRANSFERS.

To Appropriation for School-houses....	\$601 03	
Appropriation for Roads and Bridges,	32,275 92	
Appropriation for Paving.....	1,311 84	
Appropriation for Police	8,354 15	
Appropriation for Fire Department,	15,058 03	
Appropriation for Commons	3,093 81	
Appropriation for Printing and Ad- vertising.....	294 73	
Appropriation for Lighting.....	863 14	
Appropriation for Health.....	1,881 71	
Appropriation for Salaries.....	6,000 00	
		69,734 36
		<hr/> \$148,426 58
Balance undrawn, Dec. 31, 1891		18,628 35
		<hr/> \$167,054 93

P A U P E R S.

Appropriation	\$55,000 00	
	<hr/>	\$55,000 00

R E C E I P T S.

Received into the Treasury on account
of PAUPERS.

From Appropriation from Schools, for wood.....	\$848 45	
Appropriation for Roads and Bridges, for wood.....	15 74	
Appropriation for Reserve Fund, for wood.....	39 86	
Appropriation for Police, for wood,	5 50	
Appropriation for Fire Depart- ment, for wood.....	45 75	
Appropriation for Sewers and Drains, for wood.	2 00	
Appropriation for Lighting, for wood.....	10 89	
Appropriation for Health, for wood.....	5 50	
Appropriation for Pawtucket Boulevard, for wood.....	2 75	
Commonwealth, for support of State paupers (U. S. cases)..	398 39	
Commonwealth, for temporary support of State paupers (U. S. cases).....	20 05	
Commonwealth, for support of State paupers	865 23	
Commonwealth, temporary sup- port of State paupers.....	554 46	
Commonwealth, for burial of State paupers	220 00	
Commonwealth, for expenses of contagious diseases.....	5 00	
Commonwealth, for burial of War veterans	210 00	
	<hr/>	
<i>Amounts carried forward.</i>	\$3,249 57	<hr/> \$55,000 00

Amounts brought forward..... \$3,249 57 \$55,000 00

Received into the Treasury on account
of PAUPERS:

From County of Middlesex, for board of Sarah Wellesly and, Margaret Kane, at workhouse.....	84 57
City of Boston, for aid rendered Elizabeth Shaw, Lizzie A. Miner, Mary A. Driscoll and child, Patrick Dwyer and family, John Miner, James Wade, William P. Edwards and family, and Thomas McNulty.....	202 69
City of Brockton, for overdraft...	2 00
City of Cambridge, for board of Joseph McEvoy, at St. John's Hospital.....	6 42
City of Chelsea, for board of John White, William Avery, and John McCarty, at Reform School.....	186 73
City of Chicopee, for aid rendered James W. O'Brien and Michael Kennedy.....	11 00
City of Fitchburg, for board of Charles Clifford and Frank Reynolds, at Reform School..	72 02
City of Fall River, for aid rendered Ellen Noonan, John Noonan, John F. Martin and Martin Kane.....	39 85
City of Holyoke, for aid rendered Daniel Gray.....	36 27
City of Lawrence, for aid rendered Annie Donovan, Mary I. Foss and children, Mrs. William Bateman and family, Barbara Donovan, Mary A. Shea and family, Mary Benway, Mary Rogers and mother, Maria and Alice Coughlin, Barbara McDonald, James Crowley, Stephen Kennedy, Charles Coughlin, Alfred M. Denton, and Raymond Glynn,	164 65

Amounts carried forward..... \$4,055 77 \$55,000 00

Amounts brought forward..... \$4,055 77 \$55,000 00

Received into the Treasury on account
of PAUPERS :

From City of Lynn, for board and clothing of James Jackson, at Reform School	36 42	
City of Malden, for aid rendered Mary Baron, and board and clothing of Charles Bresnahan, Philip Murray, Daniel Haggerty, and William Olsen, at Reform School.....	326 77	
City of Newburyport, for aid rendered Martin H. Cogger..	2 50	
City of Newton, for aid rendered Annie Knowles and family, William Leamey, and Charles Daily	41 87	
City of New Bedford, for aid rendered Louis Lapoint.....	7 85	
City of Salem, for aid rendered Bridget O'Haria alais Kelly, and Thomas McGuire.....	3 79	
City of Sommerville, for aid rendered Annie Lyons, and James T. Collins and family, and board and clothing of John Welch, and John Garin, at Reform School.....	276 74	
City of Waltham, for aid rendered children of Edward Vallely, and board and clothing of Walter R. Doe, Albert Foster, and George Barden, at Reform School	327 78	
City of Woburn, for board of Ewd. Maguire, at St. John's Hospital,	10 00	
Town of Ayer, for board and clothing of Daniel Toohey, at Reform School.....	4 47	
Town of Acton, for aid rendered Lilian, Mary and Maud Kingsley, and Martha E. Robbins..	256 14	
Town of Amesbury, for aid rendered Mrs. Mathias Noon and Thomas Burke and family...	119 16	

Amounts carried forward..... \$5,469 26 \$55,000 00

<i>Amounts brought forward</i>	\$5,469 26	\$55,000 00
Received into the Treasury on account of PAUPERS :		
From Town of Arlington, for board and clothing of M. and J. Cour- sey, at Reform School.....	138 84	
Town of Andover, for burial of Nettie Regan, and aid ren- dered Kate Murray and John F. Dorsey.....	14 19	
Town of Billerica, for aid rendered Fred Mallison and family, and board of Thomas Degan, at Reform School	55 64	
Town of Canton, for aid rendered Bridget Duncan.....	19 79	
Town of Clinton, for aid rendered Catherine Taylor, and board of Thomas Donnelly, at Reform School.....	39 87	
Town of Chelmsford, for aid ren- dered Mrs. Kate Ward and children, Fred Russell and family, and Michael Holland, Jr., and family....	22 00	
Town of Concord, for aid rendered Mrs. Michael Holland.....	13 50	
Town of Cohasset, for aid rendered Mrs. William F. Harris and family	333 04	
Town of Danvers, for aid ren- dered Mrs. William Hender- son and Elizabeth Coffin.....	198 34	
Town of Everett, for board and clothing of Willie McCafferty, at Reform School.....	32 43	
Town of Grafton, for aid rendered Byron Ferri.....	3 57	
Town of Hopedale, for board and clothing of Harland W. Greenwood, at Reform School... ..	93 79	
Town of Leominster, for aid ren- dered Kate C. Brown.....	4 50	
Town of Lancaster, for aid ren- dered Angelina Cook.....	21 11	
<i>Amounts carried forward</i>	\$6,459 87	\$55,000 00

<i>Amounts brought forward.....</i>	\$6,459 87	\$55,000 00
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Received into the Treasury on account
of PAUPERS :

From Town of Lynnfield, for aid rendered George A. Abbott and family.....	16 15	
Town of Lincoln, for board and clothing of Charles Tyler, at Reform School.....	29 18	
Town of Medford, for board and clothing of Thomas Littlewood and William H. Stacy, at Reform School.....	178 22	
Town of Marlboro, for board and clothing of Arthur Furlong, at Reform School.....	24 22	
Town of Methuen, for aid rendered Josephine Austin....	1 71	
Town of Melrose, for aid rendered Mabel Chick....	18 56	
Town of Natick, for aid rendered Ella Witherell.....	60 00	
Town of North Reading, for aid rendered Luther F. and Bertha Bradford.....	47 97	
Town of Northfield, for aid rendered Fred Whitney and family.....	38 80	
Town of Randolph, for aid rendered Annie R. Bunberry and Patrick Doherty.....	203 95	
Town of Stoneham, for aid rendered Sarah McCrann, and board and clothing of Robert B. Bond, at Reform School.....	29 87	
Town of Stoughton, for aid rendered Mrs. John M. Clark...	76 27	
Town of Stowe, for aid rendered Mary A. Fogg....	2 00	
Town of Tewksbury, for aid rendered Mrs. Anthony McDonald.	8 29	
Town of Wilmington, for board and clothing of Robert Cloram, at Reform School.....	128 46	

<i>Amounts carried forward.....</i>	<u>\$7,323 52</u>	<u>\$55,000 00</u>
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<i>Amounts brought forward.....</i>	\$7,323 52	\$55,000 00
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Received into the Treasury on account
of PAUPERS:

From Town of Westford, for aid rendered Ella and Luella Curtis, Nellie and Margaret Casey, Bridget Larkin and Thomas O'Farrell.....	85 98	
Town of Winchester, for board and clothing of Joseph Connelly, at Reform School.....	35 04	
Town of Wakefield, for support of Frank Ames, at Reform School.....	65 00	
Town of Watertown, for support of Frank Marion, at Reform School.....	86 27	
Albert Pinder, for sales from farm,	1,432 39	
Charles H. Richardson, for State Aid of Morty Scully and Thomas Doyle, and board of Mrs. William A. Yasinski and Mrs. Pearson.	118 55	
F. A. Buttrick, Guardian, for board of David Moore, at Alms-house	130 36	
Wilder Bennett, for support of Caroline A. Bennett, at Worcester Lunatic Hospital.....	170 38	
Margaret B. Bradford, for overdraft.	16 00	
George Bowers, for support of Sarah Moulton, at Taunton Lunatic Hospital.....	33 89	
James Correll, for board of William Correll, at Alms-house	244 28	
Mrs. Peter Cassidy, for support of Peter Cassidy, at Worcester Lunatic Hospital.....	169 46	
A. Y. Caswell, for support of Mary A. Caswell, at Worcester Lunatic Hospital.....	169 46	
Mrs. F. E. Dunlap, for support of Lusylvia T. Bartlett, at Worcester Lunatic Hospital.	169 46	

<i>Amounts carried forward.....</i>	<u>\$10,250 04</u>	<u>\$55,000 00</u>
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Amounts brought forward..... \$10,250 04 \$55,000 00

Received into the Treasury on account
of PAUPERS:

From M. V. Davis, for support at Worcester Lunatic Hospital.....	21 36	
Frances Dacey, for board at Almshouse.....	4 29	
James Dawson, for support of Eliza G. Dawson, at Worcester Lunatic Hospital. . . .	35 29	
Thomas Gray, for board of Ellen Gray, at Almshouse.....	130 36	
Frank Going, for board of A. G. Jones, at Almshouse.....	2 36	
Patrick Kelly, Guardian, for support of Frank Donnelly, at Worcester Lunatic Hospital	84 03	
Est. Elbridge Livingston, for board of Albert Livingston, at Almshouse	169 46	
Est. of Mrs Joseph Neal, for board of Joseph Neal, at Almshouse.....	130 36	
George F. Offutt, for support of Fanny A. Sargent, at Danvers Lunatic Hospital.....	169 46	
F. H. Penniman, for board of Hannah Penniman, at Almshouse.....	130 36	
John Pearson, for support of Sarah Pearson, at Danvers Lunatic Hospital.....	127 67	
Henry G. Sturtevant for board of Ada F. Sturtevant, at Worcester Lunatic Hospital.....	75 67	
John C. Woodward, for support of George F. Woodward, at Danvers Lunatic Hospital....	169 46	
William S. Yasinski, for support of Abby Yasinski, at Worcester Lunatic Hospital	19 50	
Lowell Institution for Savings, on loan	15,000 00	
	<hr/>	\$26,519 67
		<hr/>
		<u>\$81,519 67</u>

EXPENDITURES.

Paid SECRETARY OF THE
BOARD OF OVERSEERS OF
THE POOR:

To Charles H. Richardson, salary.....	\$1,300 00	
	<hr/>	\$1,300 00

Paid for SERVICES AT ALMS-
HOUSE:

To Albert Pinder, Superintendent, salary.....	\$1,994 72	
William A. Lang, Chaplain and Teacher in Reform School, sal- ary.....	1,392 36	
Michael Sexton, Teacher in Reform School, salary.....	193 20	
O. L. Gaudette, Teacher in Reform School, salary.....	266 80	
Sundry persons, for labor, as per pay rolls.....	5,511 25	
	<hr/>	\$9,358 33

Paid for FUEL, GRAIN, GRO-
CERIES, PROVISIONS,
ETC., AT ALMSHOUSE:

To William E. Livingston, for coal.....	\$3,260 31	
W. P. Foye, for meal and middlings,	29 40	
William E. Livingston, for oats, meal, flour, etc.....	1,969 99	
Jos. Miller, for meal, middlings, etc.,	841 21	
E. J. Noyes, for hay.....	7 35	
E. N. Wood & Co., for meal, oat meal, buckwheat, etc.....	671 07	
William J. Burbeck, for milk. . . .	273 50	
Buttrick & Co., for molasses.....	56 62	
G. J. & D. Bradt, for crackers.....	285 00	
C. W. Cheney, for ginger ale.....	2 10	
Chase & Sanborn, for coffee.....	482 50	
Clarence G. Coburn, for cheese and standard food.....	21 75	
Donovan & Co., for tea and beans..	440 38	
Fleischmann & Co., for yeast.....	111 49	
	<hr/>	
<i>Amounts carried forward.....</i>	\$8,452 67	\$10,658 33

Amounts brought forward..... \$8,452 67 \$10,658 33

Paid for FUEL, GRAIN, GROCERIES, PROVISIONS, ETC.,
AT ALMSHOUSE:

To J. D. Hartwell & Co., for flour and tobacco.....	872 55	
Henry Hatch, for beans, peas, butter, eggs, etc.....	374 71	
Kilpatrick Bros., for fruit, confectionery, and fireworks.....	98 46	
William Henry Maule, for seeds....	29 30	
H. B. Newhall & Son, for tea and coffee.....	27 34	
Nichols & Co., for tea and molasses,	626 30	
William Nichols & Co., for flour, groceries, etc.....	1,945 81	
E. J. O'Neil, for groceries.....	1,074 89	
Caleb L. Smith, for groceries.....	179 92	
Simpson & Rowland, for groceries..	228 57	
M. Corbett, for provisions.....	1,037 83	
S. K. Chase, for provisions.....	427 01	
G. M. Foster, for butter, cheese, potatoes, etc.....	3,478 32	
John M. Farrell, for beef and poultry,	232 26	
Henry J. Farrell, for beef and poultry,	34 81	
Jewett & Swift, for beef and pork..	1,531 50	
New Washington Market, for provisions	132 16	
F. A. Tuttle, for provisions, fruit, etc.	1,270 62	
Union Market, for provisions.....	65 55	
C. W. Wilder, for curing hams.....	11 10	
J. Belyea, for fish.....	15 00	
J. A. Baker, for fish.....	101 25	
Caswell, Livermore & Co., for fish..	550 60	
M. B. Randlett, for fish.....	90 35	
		22,888 88

Paid for CLOTHING, DRY GOODS,
ETC., AT ALMSHOUSE:

To Bon Marché, for hoods and hats....	\$4 93	
Cook, Taylor & Co., for dry goods..	653 57	
Cutter & Walker Manufacturing Co., for suspenders.....	15 75	
<i>Amounts carried forward</i>	\$674 25	\$33,547 21

<i>Amounts brought forward</i>	\$674 25	\$33,547 21
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Paid for CLOTHING, DRY GOODS,
ETC., AT ALMSHOUSE:

To Putnam & Son, for clothing.....	607 15	
A. G. Pollard & Co., for dry goods,	421 49	
Shaw Stocking Co., for stockings...	202 69	
Willard A. Brown, for leather,		
thread, knives, tacks, etc.....	67 77	
J. Clark Glidden, for shoes.....	22 35	
A. M. Huntoon & Co., for boots		
and shoes.....	350 81	
C. A. Mitchell & Co., for boots and		
shoes.....	268 21	
O'Sullivan Bros., for shoes.....	77 55	
	<hr/>	2,692 27

Paid for DRUGS, MEDICINES,
ETC., AT ALMSHOUSE:

To C. F. Blanchard, for medicines.....	\$15 25	
Carleton & Hovey, for drugs and		
medicines.....	263 52	
A. B. Chapman, for medicine.....	63 45	
Ellingwood & Co., for elatol.....	50 00	
F. C. Goodale & Co., for splints ...	2 50	
C. W. Lerner & Co., for disinfectant,	15 75	
	<hr/>	410 47

Paid for SUNDRIES AT ALMS-
HOUSE:

To Appropriation for Roads and Bridges,		
for Engineering.....	\$8 25	
Appropriation for Water Works, for		
water	1,039 95	
Lowell Gas Light Co., for gas.....	784 41	
New England Telephone and Tele-		
graph Co., for service.....	33 90	
A. B. Adams, for chestnut posts....	20 00	
Burnham, Forrest & Davis, for lum-		
ber	630 72	
Burnham & Davis, for lumber.....	699 54	
A. L. Brooks & Co., for lumber.....	8 58	
Davis & Sargent, for lumber.....	5 05	
	<hr/>	
<i>Amounts carried forward</i>	\$3,330 40	\$36,649 95

<i>Amounts brought forward.....</i>	\$3,230 40	\$36,649 95
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Paid for SUNDRIES AT ALMS-
HOUSE:

To S. W. Fletcher & Co., for window and door frames.....	62 65	
Howe Bros., & Co., for lumber.....	70 96	
Charles E. Adams, for lanterns, hardware, etc.....	28 39	
Bartlett & Dow, for hardware and tools.....	531 66	
Boutwell Bros., for iron, steel, etc...	31 49	
Frederick Taylor Co., for hardware, tools, etc.....	2 23	
T. Costello & Co., for pipe, fittings, labor, etc.....	92 45	
Eastern Electric Light and Storage Battery Co., for labor on bells..	1 75	
L. G. Hall & Co., for electric ap- paratus and labor.....	64 03	
S. H. Jones, for pipe, fittings, labor, etc.....	27 25	
Alvin Lawrence, for clocks and re- paring.....	27 05	
Pettingell, Andrews & Co., for wire, hooks, etc.....	99 99	
Rice & Company, for corn poppers..	3 00	
J. W. Stewart & Co., for pipe, fittings, labor, etc.....	570 01	
Scannell & Wholey, for repairing boilers.....	71 64	
Singer Manufacturing Co., for re- pairing sewing machine.....	3 56	
George F. Allen, for bells, robes, re- pairing harnesses, etc.....	164 10	
Fay Bros., for exchange of wagons..	100 00	
M. V. B. Libbey, for shoeing horses.	116 50	
Sawyer Carriage Co., for repairing wagon.....	54 95	
G. A. Andrews, Agt., for cresole....	11 50	
William P. Atwood, for analysis of water.....	5 00	
C. B. Coburn & Co., for oil, glass, glue, lead, brushes, etc.....	206 47	
C. G. Coburn, for phosphate and guano.....	85 50	
<i>Amounts carried forward</i>	<u>\$5,662 53</u>	<u>\$36,649 95</u>

<i>Amounts brought forward</i>	\$5,662 53	\$36,649 95
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Paid for SUNDRIES AT ALMS-
HOUSE:

To William Dupee, for making cider..	10 12
Daniel Gage, for ice.....	256 20.
Lowell Rubber Co., for rubber sheet- ing.....	3 60
James Palm, for soap chips.....	184 69
Talbot Dyewood & Chemical Co., for ammonia, chloride lime, etc,	174 02
J. J. Chuin, for spectacles.....	12 50
Josiah Gates & Sons, for rubber belt,	3 41
Goodyear Gossamer Co., rubber boots, shoes and blacking.....	17 89
A. L. Kittredge & Co., for paint, paper and labor.....	308 27
Lamson & Pinder, for crockery, pails, chinneys, etc.....	159 28
W. E. Leinhas & Co., for hair and excelsior.....	3 90
Lamson & Moulton, for combs, thimbles, needles, etc.....	29 06
J. F. Puffer & Son, for furniture, crockery, etc.....	695 32
A. Y. Caswell, for mileage tickets...	80 00
Albert Pinder, for postage, removing insane persons, etc.....	198 59
Town of Chelmsford, for taxes.....	36 55
Ellwanger & Barry, for trees and shrubs.....	25 00
Charles G. Fletcher, for trees.....	5 30
E. Sheppard & Son, for plants, seeds, shrubs and celery.....	18 27
H. C. Church & Son, for insurance,	360 00
F. P. Coggeshall, for pens and ink,	3 25
Lowell Daily Courier, for subscription,	6 00
J. Merrill & Son, for blank books, stationery, etc.....	70 83
H. W. Lovejoy, for veterinary den- tistry.....	6 25
Jesse A. Viles, for professional ser- vices.....	6 00
Granville Coburn, for swine.....	11 00
Chelmsford Pickling Works, for slaughtering.....	9 00

<i>Amounts carried forward</i>	\$8,356 83	\$36,649 95
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<i>Amounts brought forward.....</i>	\$8,356 83	\$36,649 95
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Paid for SUNDRIES AT ALMS-
HOUSE:

To F. W. Merrill, for slaughtering.....	12 05	
J. W. Bennett & Co., for roofing composition	2 80	
George R. Hutchins, for shingles and labor.....	352 68	
William E. Livingston, for sand, lime and cement.....	160 55	
D. Moody Prescott, for mason work and material.....	13 00	
Charles Runels, for stone posts.....	9 60	
Boston & Maine Railroad, for trans- portation	4 80	
Boston & Maine Railroad, Western Division, for transportation.....	4 51	
Boston & Maine Railroad, Southern Division, for transportation.....	80	
Boston & Maine Railroad, Lowell System, for transportation.....	16 02	
American Express Co., for trans- portation	65	
Lovejoy-Paul Express Co., for trans- portation.....	50	
	<hr/>	8,874 79

Paid on ACCOUNT OF DISPEN-
SARY:

To Ernest L. Coullard, for services as clerk.	\$467 14	
William H. Sheehan, for services as clerk	312 86	
William H. Sheehan, for cash paid for laundering.....	1 92	
F. & E. Bailey & Co., for medicines,	4 94	
Clinton L. Bruce, for plasters.....	9 34	
P. Cummiskey Co., for whiskey, wine and brandy.....	334 50	
Codman & Shurtleff, for operating instruments, etc.....	50 63	
Ellingwood & Co., for medicines....	50	
John I. Gibson & Co., for medicines,	11 15	
Goodale & Co., for medicines.....	11 66	
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<i>Amounts carried forward.....</i>	\$1,204 64	\$45,524 74

<i>Amounts brought forward</i>	\$1,204 64	\$45,524 74
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Paid on ACCOUNT OF DISPENSARY :

To H. O. Stevenson, for drugs, medicines, etc.....	548 02
John Wyeth & Bros., for medicines,	40 79
Buttrick & Co., for sugar, lard, matches, potash, etc.....	13 35
J. D. Hartwell & Co., for sugar.....	6 40
E. N. Wood & Co., for flaxseed meal,	2 10
J. F. Puffer & Co., for bottles, basins, etc.....	13 05
Lowell Steam Carpet Cleaning Works, for cleaning and repairing carpets.....	4 35
Lowell House Furnishing Co., for poles.....	40
Manning & Leighton, for lace.....	80
A. Monier, for blankets.....	6 00
A. G. Pollard & Co., for cloth, crinoline, etc.....	16 33
Batcheller, Dumas & Co., for blank books.....	8 25
Vox Populi Press, for postal cards...	4 25
L. G. Hall & Co., for repairing batteries.....	3 00
Appropriation for Roads and Bridges, for repairing harnesses, etc. ...	3 60
Appropriation for Public Buildings, for lumber and labor.....	5 27
Hugh Armstrong, for services on ambulance.....	669 00
William A. Fifield, for services on ambulance.....	134 00
Charles H. Ricker, for services as Ambulance Physician.....	117 42
New England Telephone and Telegraph Co., for service.....	68 20
Bartlett & Dow, for hardware, etc...	2 48
Charles Howard, for handcuffs.....	4 00
H. B. Shattuck, for gong, handcuffs, fixtures, etc.....	21 75
E. E. Sergent, for electric magneto bell and labor.....	8 00
C. B. Coburn & Co., for lantern and brush.....	1 77

<i>Amounts carried forward</i>	\$2,907 22	\$45,524 74
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Amounts brought forward..... \$2,907 22 \$45,524 74

Paid on ACCOUNT OF DISPENSARY :

To Garner & Nichols, for oil, salt and brooms	4 02	
E. A. & A. T. Smith, for concrete...	99 60	
T. M. Bolton, for harness, collar, hangers, straps, etc	94 50	
A. H. Cluer, for repairing harness...	1 75	
H. J. Draper, for painting	2 25	
C. H. Hanson, for robes	37 50	
Sawyer Carriage Co., for ambulance and repairing.....	728 15	
John Cross, for canvas.	2 50	
George A. Faneuf, for splints.....	28 00	
Goodyear Gossamer Co., for rubber blanket	1 50	
Waterbury Button Co., for buttons,	5 63	
Rose Armstrong, for laundering....	4 00	
Viola Fifield, for laundering.....	3 32	
George E. Stanley, for transportation,	25	
		<hr/> 3,920 19

Paid for SERVICES OF PHYSICIANS OUT OF ALMS-HOUSE :

To W. G. Eaton.....	\$100 00	
James B. Field.....	9 00	
J. Arthur Gage.....	15 00	
A. E. Gillard.....	152 00	
A. J. Halpin.....	91 63	
J. C. Irish.....	20 00	
W. A. Johnson.....	144 02	
T. E. McOwen.....	123 69	
Charles H. Ricker.....	158 36	
W. Sawyer.....	26 00	
		<hr/> 839 70

Paid for COFFINS, INTERMENTS, ETC.:

To Appropriation for Public Buildings, for coffins.....	\$447 00	
Felix Albert, for interments.....	35 00	
J. S. Bourdon, for interments.....	46 00	
		<hr/>
<i>Amounts carried forward</i>	\$528 00	\$50,284 63

<i>Amounts brought forward</i>	\$528 00	\$50,284 63
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Paid for COFFINS, INTERMENTS,
ETC.:

To J. W. Brooks, for interments.....	97 00	
J. B. Currier, for interments.....	11 00	
Peter Davey, for interments.....	49 00	
E. H. Duprez, for interments.....	4 00	
James A. Keyes, for interments....	40 00	
James F. O'Donnell, for interments..	69 00	
	<hr/>	798 00

Paid for LABOR, FUEL, ETC., AT
WOOD YARD:

To Sundry persons, for labor as per pay rolls	\$2,436 63	
Appropriation for Roads and Bridges, for labor and material.....	8 66	
Appropriation for Public Buildings, for labor and material for shed,	300 00	
Appropriation for Water Works, for water	20 00	
B. G. Brown, for wood.....	219 32	
Dennis Leblanc, for wood.....	223 34	
William E. Livingston, for coal....	456 13	
Charles Clapp, for hay	65 47	
William E. Livingston, for grain....	63 24	
T. J. McDonald, for oats and hay...	108 68	
E. N. Wood & Co., for oats.....	27 00	
O. D. Wilder, for oats, meal and straw	127 94	
A. L. Brooks & Co., for lumber....	1 75	
Howe Bros. & Co., for lumber.....	35 86	
William Kelly & Son, for door and frame.....	12 00	
J. C. Bennett, for hardware, oil and hose	24 87	
H. R. Barker Manufacturing Co., for solder, pipe, etc.	14 99	
Farrell & Conaton, for bracket and broom.....	1 60	
T. M. Bolton, for repairing harness, etc.	3 00	
Abram Coffin, for ink.....	1 00	
C. B. Coburn & Co., for lantern...	2 00	

<i>Amounts carried forward</i>	\$4,153 48	\$51,082 63
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Amounts brought forward..... \$4,153 48 \$51,082 63

Paid for LABOR, FUEL, ETC., AT
WOOD YARD:

To Daniel Gage, for ice.....	8 70	
A. W. Baker, for veterinary dentistry	8 00	
T. H. Kittredge, for broom material,	2 00	
A. H. Cluer, for repairing harness..	10 50	
O. K. Dexter, for shoeing horses, etc.,	105 34	
Daniel Brown, for broom material...	1 02	
C. F. Foss & Co., for mason work and material.....	11 97	
C. H. Hanson, for blankets, chamois skins, whips, etc.....	24 85	
		<hr/> 4,325 86

Paid for SUPPORT OF SUNDRY
PERSONS OUT OF ALMS-
HOUSE:

To Commonwealth, for support of Sundry persons, as follows: In Worcester Lunatic Hospital, Delia McMahon, Margaret Delaney, Nancy A. Roberts, Dora A. Poor, Catherine Tenney, Ann Barrett, Margaret Drohan, Jane Scully, Alice B. Yasinski, Elizabeth Dawson, Marie Choninard, Bridget Fitzpatrick, Ada F. Sturtevant, Emma M. Morgan, Ann Neilon, Margaret Kelly, Michael Gorman, Thomas Flynn, Elbridge G. Knowles, Frank E. Worthley, William W. Horne, Frank Donnelly, William Hyde, Charles H. Leavett, Edwin Stott, James Minn, James McCartney, Jas. Commerford, and M. V. Davis. In Westboro Insane Hospital, Elizabeth D. Foss, Mary Collins, and James McGinn. In Taunton Lunatic Hospital, Sarah W. Moulton. In State Farm (Insane), Will-

Amount carried forward..... \$55,408 49

Amount brought forward..... \$55,408 49

Paid for SUPPORT OF SUNDRY
PERSONS OUT OF ALMS-
HOUSE:

iam Doyle, John H. Ward, Michael O'Mealey, John McCarron, and Joseph Hill. In State Almshouse, Annie Daily, Miller or Riley, Mary Trueshane, Roger Lee, and M. Quinlan. In School for Feeble Minded, Kate Roberts,	\$2,606 69
John M. Fisk, for support of sundry persons in Middlesex County House of Correction.....	219 43
Danvers Lunatic Hospital, for support of Mary Collins, Edith P. Bissell, Helen Coleman, Fanny A. Sargent, Jane Beckwith, Hannah Shea, Sarah Pearson, Mary O'Brien, Henry M. Flanders, Michael O'Mealey, George T. Woodward, David C. Courser, James J. Dunphy, Ora A. Brown, Edward Price, and George H. Nichols alias Henry G. Nickles.....	2,387 36
Taunton Lunatic Hospital, for support of Frank Allen.....	126 75
Westboro' Insane Hospital, for support of Anna A. Harding, Elizabeth D. Foss, Joseph Hill, Henry F. Smith and James McGinn....	229 97
Worcester Lunatic Hospital, for support of Dora A. Poor, Mary A. Caswell, Lusylvia T. Bartlett, Mary Briscoe, Jane B. Berry, Mary J. Fenderson, Augusta J. Nickles, Margaret Gallagher, Catherine McCabe, Octavia M. Caza, Elizabeth Erskine, Bridget Kelly, Margaret Delaney, Ann Barrett, Nancy A. Roberts, Elizabeth G. Dawson, Delia McMahon, Bridget Fitzpatrick, Ann Neilon, Margaret Kelly, Alice B. Yasinski, Margaret Drohan,	

Amounts carried forward..... \$5,570 20 \$55,408 49

Amounts brought forward..... \$5,570 20 \$55,408 49

Paid for SUPPORT OF SUNDRY
PERSONS OUT OF ALMS-
HOUSE:

Mary E. Lacour, Emma M. Morgan, Ada F. Sturtevant, James W. Burnham, Peter Cassidy, Francis Quinn, Jerremy B. Folsom, Frank W. Gavill, Terance McGovern, John Tobin, Michael Gorman, Elbridge G. Knowles, Frank E. Worthley, Frank Donnelly, Charles H. Leavitt, James Quinn, James McCartney, Michael Matthews, William Hyde, Edwin Stott, James Commerford and Martin V. Davis.....	3,762 51
Hospital Cottages for Children, for support of Carl Hart.....	52 00
Home for - Young Women and Children, for board of Lillian, Mary and Maud Kingsley.....	238 50
Lowell Hospital Association, for board of Ida Warshawsky, Frank J. Archer, Joseph Blair, Oliver Huseran, John Meehan and Ramil Comtois.....	157 71
Massachusetts School for Feeble Minded, for support of Katie Roberts.....	127 67
Perkins Institution and Massachusetts School for the Blind, for support of Edward Riley.....	52 65
Sisters of Charity (Salem). for board of Chas. H. and Wm. F. Howe.	66 00
St. Peter's Orphan Asylum, for board of Annie Smith, Lena Smith, and Mary Cody.....	176 00
St. John's Hospital, for board of Elizbeth A. Monty, Annie Gaffney, Annie Langley, Ellen Cohen, Bridget Sweeney, Nora McGrath, Anne Kennelly. Mary Healey, Winnifred Healey,	

Amounts carried forward..... \$10,203 24 \$55,408 49

<i>Amounts brought forward.....</i>	\$10,203 24	\$55,408 49
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Paid for SUPPORT OF SUNDRY
PERSONS OUT OF ALMS-
HOUSE:

Margeret Healey, Mary Mc-
Carthy, Elizabeth Coffin, Mabel
Chick, Rose Duffin, Mary Fitz-
gerald, Mary Loughlin, Ellen
Conner, Fannie O'Neil, Jane
Brady, Sarah McCarthy, Mary
McShea, Josephine Gilbert,
Hannah Haggerty, Mary Scully,
Bridget Ryan, Mary O'Brien,
Elizabeth McDonald, Susan Mc-
Laughlin, Catherine O'Heir,
Rose McLaughlin, Mary Reilly,
Bridget Dookins, Mary Collins,
Mary Gorman, Mary Noon,
Ellen Henderson, Laura Will-
ard, Ida Glass, Erminie Mayotte,
Ellen Sears, Mary Judge, Annie
A. Suza, Eloise Delisle, Mary A.
Linnehan, Bridget Blessington,
Catherine McNiff, Georgianna
LeBrique, Mary A. Logue, Mary
Logue, Hulda Lingdake, Hannah
Reddington, Annie Carey, Susan
Burke, Catherine Brickley,
Lavinia Lacombe, Sarah Mc-
Nulty, Ellen Friar, Florence
Jones, Sarah McRand, Eliza-
beth Cox, Angelina Reni Cou-
terete, Mary McDidd, Mary
J. Degnan, Teresa Cummings,
Mary Shea, Catherine Lyons,
Mary Larson, Hattie Hemenway,
Ellen Sweeney, Maria Sweeney,
Julia Warnock, Rose Ayers,
Ellen Keefe, Cyrach Martel,
Annie Grady, Bridget Holden,
Elizabeth Rock, Mary Kelly,
Katherine Walsh, Rose Dailey,
Margaret O'Malley, Angelina
Cook, Ellen Rielly, Katherine
Nevins, Mary Gorman, Ann
Kelleher, Anna Wells, Mary
Crogan, Elizabeth Tuttle, John

<i>Amounts carried forward.....</i>	<hr/> \$10,203 24	<hr/> \$55,408 49
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Amounts brought forward..... \$10,203 24 \$55,408 49

Paid for SUPPORT OF SUNDRY
PERSONS OUT OF ALMS-
HOUSE:

Hogan, John Owens, Joseph
Healey, William Fleming, Will-
iam Ryan, John Kennedy,
Richard Powers, John Curry,
John Meehan, Westley Daikins.
Peter Hasty, John McGinley.
Michael Martin, Patrick Regan,
Timothy Toomey, John O'Heir,
Patrick Flannagan, Daniel Mc-
Cleary, Michael P. Calnan,
James Kennedy, David Hamey,
Stephen Gannon, Wm. Hector,
George H. Williams, Henry Mc-
Williamson, John Brady, Éman-
uel Inasir, Terance O'Brien,
Thomas Heelon, Henry Fahey,
John Conners, Edward Conners,
John Cogan, Joseph McEvoy,
Byron Ferry, Samuel Sykes,
Michael Claney, George Delisle,
Robertson Delisle, Joseph Cook,
Thomas McGrath, Bernard Han-
nigan, Louis Dion, Micheal
Donohoe, Mark Brown, Joseph
Upnell, John Nicholson, Frank
Burns, Alexander Walsh, Ed-
ward Maguire, Frank Masey,
Patrick Calnin, James Jackson.
Wm. Cochrane, Peter Gagnon,
Thomas Delaney, William S.
Leighton, Edward M. Towne,
Michael Cummings. John Sut-
cliffe, Frank Teague, Thomas
Smith, Thomas Pinder, William
H. Smith, Louis Lapoint, John
Tully, Ambrose Coyle, James H.
Heyworth, Frank Burns, John
Kelty, Jos. Spooney, Jas. Mc-
Sorley, Jos. Martin, Edwin Hor-
rocks, Thos. Lynch, Wm. Barry,
Chas. Daily, Jas. Manning, Pat-

Amounts carried forward \$10,203 24 \$55,408 49

<i>Amounts brought forward.....</i>	\$10,203 24	\$55,408 49
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Paid for SUPPORT OF SUNDRY
PERSONS OUT OF ALMS-
HOUSE:

rick Reilly, Daniel Cregg, Thos.
Farrell. Patrick Casey, James
Gormley, Daniel Dailey, Chas.
Peterson, John McKenna, Robt.
Keenan, John Deacon, Louis
Brown, James Jackson, Patrick
Harrigan, Patrick Heslin, David
P. Moffitt, Matthew McCaffery,
David Peterson, John McCarty,
Arthur White, James O'Bryne,
Thomas Harrigan, John Scanlan,
Andrew Purcell, Makley Goros,
Dennis O'Neil, Edward Godin,
Michael Matthews, Daniel W.
Murphy, Thomas Lynch, Samuel
Mack, William McGann. Loring
Perley, James Cox, Wm. Cogan,
George T. Anthony, Thomas
Robottom, Timothy Sheehan,
John H. Armstrong, John F.
Gaffney, Henry Marceau, and
Patrick Gallagher.....

\$4,263 12

14,466 36

Paid CITIES AND TOWNS FOR
AID RENDERED SUNDRY
PERSONS:

To City of Boston, for aid rendered
Ann S. Roberts, Julia A. Robin-
son, Catherine Haley, Mary
O'Rourke, Sarah Jerry, Char-
lotte A. Bolton, Joanna Stevens,
Ida Witherell, Anthony H. Cor-
rigan. John Ryan, Henry Dris-
coll alias Quinn. Charles Chap-
man, John F. Maguire, William
P. Cook, Charles A. Hope, Jas.
Murray, John Leach, and Frank
Pattie, and burial of Ellen
Casey.....

550 92

<i>Amounts carried forward</i>	\$550 92	\$69,874 85
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<i>Amounts brought forward.....</i>	\$550 92	\$69,874 85
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Paid CITIES AND TOWNS FOR
AID RENDERED SUNDRY
PERSONS:

To City of Cambridge, for aid rendered Mrs. Terance W. Kelly, Mary Farley and children, and Mar- garet Kelly.....	14 14	
City of Chelsea, for aid rendered David Banks	3 00	
City of Fall River, for aid ren- dered Elizabeth Williams. Mary Guinane, Mary Fagan, Charles and Mary A. Dalton, and Eugene Moriarty.....	35 64	
City of Fitchburg, for military aid rendered Mrs. James Robinson..	90 00	
City of Lawrence, for aid rendered Mrs. John Mauray, Margaret McCue, Irene Crossland, Alice Keenan, Mary Regan, Sarah Murray, Mary Preston, Patrick Manning, Thomas Dyer, Charles Devlin and John Murray.....	150 20	
City of Lynn, for aid rendered Mrs. Frank W. Dresser, Michael Butler and family, and children of Edwin G. Howes.. ..	134 00	
City of Marlboro', for aid rendered Eva Leveskue and Peter Jac- ques	32 60	
City of Malden, for aid rendered Catherine Hughes.....	167 80	
City of Newburyport, for aid ren- dered Mrs. John J. Morrison...	42 00	
City of New Bedford, for aid ren- dered Maggie Burke, Jane Ma- lone and Peter Turnbull.....	11 88	
City of Salem, for aid rendered Mrs. James King.....	4 25	
City of Somerville, for aid rendered Michael Sheridan.....	19 25	
City of Springfield, for aid rendered Patrick Hannifin	12 85	
City of Waltham, for aid rendered Rose Ayer and child.....	16 23	
<i>Amounts carried forward</i>	<hr/> \$1,284 76	<hr/> \$69,874 85

<i>Amounts brought forward.....</i>	\$1,284 76	\$69,874 85
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Paid CITIES AND TOWNS FOR
AID RENDERED SUNDRY
PERSONS:

To City of Worcester, for aid rendered Timothy Ring and James Quinn,	37 03	
Town of Amesbury, for aid rendered Mrs. Edward Lanctot.....	7 95	
Town of Beverly, for aid rendered David Rogers.....	197 99	
Town of Chelmsford, for aid rendered Mrs. Varnum and Martha Hull.....	41 64	
Town of Dracut, for aid rendered Mary A. Harvey and George O. Goodwin.....	106 30	
Town of Hudson, for aid rendered Mrs. J. T. Bushy and family...	188 85	
Town of Medway, for aid rendered Mrs. Egan.....	2 21	
Town of Methuen, for aid rendered A. W. Doe, and burial of James Wilde.....	39 60	
Town of North Andover, for aid rendered Mary Adams.....	36 00	
Town of North Reading, for aid of Luther T. and Bertha Bradford,	5 33	
Town of Peabody, for aid rendered Annie Chase.....	3 25	
Town of Westford, for aid rendered Mary Gannon.....	256 00	
Town of Weymouth, for aid rendered Jerome F. Rice and children and George Rice.....	142 00	
	<hr/>	2,348 91

Paid for AID RENDERED SUN-
DRY PERSONS OUT OF
ALMSHOUSE:

To H. G. T. Aldrich, for board of Jane Wright.....	\$52 49	
James Brown, for board of Brown children.....	72 00	
Thomas Bradley, cash.....	25 00	
Margaretta B. Bradford, cash.....	56 00	
	<hr/>	
<i>Amounts carried forward.....</i>	\$205 49	\$72,223 76

<i>Amounts brought forward.....</i>	\$205 49	\$72,223 76
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Paid for AID RENDERED SUN-
DRY PERSONS OUT OF
ALMSHOUSE:

To Julia Cole, for board of Ellen Holmes.....	36 00
Angelina Cook, cash.....	12 00
Thomas P. Casey, cash.....	84 00
Margaret Clark, cash,....	17 71
Margaret Dunnigan, cash.....	36 00
James Devine, cash.....	72 00
Mrs. S. M. Dickey, cash.....	102 00
Patrick Doherty, cash.....	48 00
Lucretia Freeman, cash.....	72 00
B. F. Foster, cash.....	112 00
Anselme Fontaine, for rent for Angelina Cook.....	4 00
Joseph M. Fowler, cash.....	60 00
William A. Fifield, cash.....	15 00
William Goodale, cash.....	48 00
Alma Gregg, for board of Jones children.....	120 00
Sarah Harmon, for rent.....	60 00
Patrick Hand, for board of Kehoe children.....	24 00
Sarah L. Harvey, cash.....	24 00
Margaret Hogan, cash.....	32 00
Mrs. William Henderson, cash.....	6 00
Eliza Jordan, cash.....	50 00
William T. Kenneson, rent for Mrs. William F. Harris.....	24 00
Mrs. Albert C. Lang, cash.....	75 00
E. W. Lovejoy, rent for Mrs. William F. Harris.....	30 00
S. P. Mansur, for aid rendered Joseph Lowe.....	18 00
Mrs. Elijah Mixer, cash.....	104 30
Jane McQuade, cash.....	72 00
Mary McLaughlin, for board of Ter- ence O'Brien.....	40 00
Mrs. Anthony McDonald, cash.....	17 44
Rebecca Mullen, cash.....	25 00
John A. O'Brien, cash.....	20 00
Mary E. Perry, board of Jane Wright.....	25 71

<i>Amounts carried forward.....</i>	\$1,691 65	\$72,223 76
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<i>Amounts brought forward.....</i>	\$1,691 65	\$72,223 76
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Paid for AID RENDERED SUN-
DRY PERSONS OUT OF
ALMSHOUSE:

To Ann Powers, cash.....	100 00	
Samuel W. Preston, cash.....	50 00	
D. J. Ring, rent for Mrs. William F. Harris.....	36 00	
Catherine Roach, cash.....	15 00	
Mrs. F. A. Roberts, cash allowed M. A. Tuttle and wife.....	48 00	
Annie B. Richardson, for aid ren- dered Mrs. Hart.....	2 84	
Sarah T. Richardson, cash.....	10 00	
Henry Runels, rent for Mary A. Fogg.....	3 50	
F. E. Saunders, for cash allowed Charles LeBarron... ..	60 00	
Agnes Smith, cash.....	96 00	
Mrs. Ira Stickney, cash.....	120 00	
Elizabeth Shaw, cash.....	89 00	
George Stott, cash.....	5 00	
Olive W. Sanborn, cash.....	12 00	
Mary Tenary, for board of Annie Tenary	78 20	
Mary J. Upton, for board of Annie and Ada Moran.....	156 47	
A. G. Thompson, rent for Mrs. Sumner P. Wyman.....	10 00	
Johannah Welch, for board of William Gannon	48 00	
Mrs. Frank Wood, cash.....	300 00	
Minerva White, cash.....	20 00	
Ella Witherell, cash... ..	60 00	
	<hr/>	3,011 66

Paid for PROVISIONS, FUEL,
ETC., ON ORDERS:

To Buttrick & Co., for groceries.....	\$39 00	
John H. Burke & Co., for groceries,	8 00	
Michael Corbett, for provisions....	39 00	
S. W. Churchill, for groceries.....	137 00	
J. L. Chalifoux, for clothing.....	13 06	
	<hr/>	
<i>Amounts carried forward.</i>	\$236 06	\$75,235 42

<i>Amounts brought forward.....</i>	\$236 06	\$75,235 42
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Paid for PROVISIONS, FUEL,
ETC., ON ORDERS:

To A. W. Derbyshire & Co., for groceries	27 00	
Donovan & Co., for groceries	27 00	
Charles M. Erskine, for groceries...	3 00	
J. W. Heir, for groceries.....	54 00	
J. D. Hartwell & Co., for groceries,	48 00	
Harvey Hadley, for groceries.....	1 50	
Howard & Wilson, for coal.....	1 85	
P. Keyes, Jr., for groceries.....	22 00	
James Love, for groceries:.....	126 00	
Lowell Gas Light Co., for coke.....	54 00	
William E. Livingston, for coal.....	34 25	
McDonald Bros., for groceries.....	3 00	
F. D. Munn & Son, for groceries...	6 00	
L. T. Montferrand, for dry goods...	3 50	
C. A. Mitchell & Co., for boots, shoes and rubbers.....	5 42	
William Nichols & Co., for groceries,	9 00	
A. D. Puffer & Son, for groceries...	18 00	
J. B. Richardson & Sons, for groceries,	1 00	
Orrin B. Ranlett, for groceries.....	44 00	
Caleb L. Smith, for groceries.....	36 00	
Stiles & Co., for groceries.....	6 00	
Charles E. Wilson, for groceries....	2 00	
A. C. Wheelock, rent for Annie R. Bunberry.....	54 00	
	<hr/>	822 58

Paid for SUNDRIES OUT OF
ALMSHOUSE:

To James F. Walsh, for services as Clerk in Secretary's Office.....	\$997 36	
Nellie A. Keyes, for services as Clerk in Secretary's Office.....	498 25	
New England Telephone and Tele- graph Co., for service.....	52 34	
C. H. Richardson, for travelling ex- penses, postage, etc.....	84 15	
Boston & Maine Railroad, for tickets,	22 40	
A. Y. Caswell, for railroad tickets..	42 82	
George O. White, for railroad tickets,	119 10	
	<hr/>	
<i>Amounts carried forward.....</i>	\$1,816 42	\$76,058 00

Amounts brought forward..... \$1,816 42 \$76,058 00

Paid for SUNDRIES OUT OF
ALMSHOUSE:

To Citizen Newspaper Co., for envelopes,	4 00	
Campbell & Hanscom, for cards and printing.....	5 00	
Bachelor, Dumas & Co., for binding,	4 00	
H. C. Church & Son, for mucilage, pens, etc.....	3 75	
G. C. Prince & Son, for ink.....	1 45	
Thomas Groom & Co., for blank books..	6 50	
Thomas H. Lawler, for envelopes, ink, erasers, etc...	6 10	
Cabill Bros., for shoeing horse.....	2 30	
Dyer & Patterson, for whip.....	1 75	
A. L. Kittredge & Co., for cord, shade, roller and labor.....	1 75	
Stanton & Thurston, for watering street.....	6 75	
Morse & Sparks, for carriage hire... .	30 00	
Samuel Tompkins, for teaming	2 00	
American Express Co., for transpor- tation.....	50	
Boston & Maine Railroad, Lowell System, for transportation.....	5 44	
	<hr/>	1,897 71
Total expenditure for the year 1891.....		\$77,955 71
Balance undrawn Dec. 31, 1891.....		3,563 96
		<hr/>
		\$81,519 67
		<hr/>

P O L I C E .

Appropriation.....	\$70,000 00	
	<hr/>	\$70,000 00

R E C E I P T S .

Received into the Treasury on account
of POLICE:

From Appropriation for Reserved Fund, for services of officers.....	\$1,200 00	
Appropriation for Improvement in Andover Street Sewer Sys- tem, for services of officers..	222 75	
Appropriation for Health, for ser- vices of officers.....	38 50	
Henry G. Cushing, for fines.....	120 00	
James F. Savage, for fines, fees of officers, etc.....	12,387 32	
County of Middlesex, for storing liquor.....	80 00	
Charles Howard, for services of officers, sales of cloth, etc....	3,689 18	
Frederick Taylor Co., for over- draft	57	
	<hr/>	17,738 70
Transferred from Reserved Fund.....		8,354 15
		<hr/>
		\$96,092 85
		<hr/>

E X P E N D I T U R E S .

Paid CHIEF OF POLICE AND
POLICE JUSTICE:

To Jacob G. Favor, Chief of Police, salary	\$48 39	
Charles Howard, Chief of Police, salary	1,751 61	
Samuel P. Hadley, Police Justice, salary	100 00	
	<hr/>	1,900 00
<i>Amount carried forward.....</i>		<hr/>
		\$1,900 00

Amount brought forward..... \$1,900 00

Paid DEPUTY CHIEFS OF POLICE:

To Charles Howard, Deputy Chief of Police, salary	\$37 63	
George R. Davis, Deputy Chief of Police, salary	1,400 00	
James A. McQuade, Deputy Chief of Police, salary	1,283 33	
	<hr/>	2,720 96

Paid for SERVICES OF POLICE OFFICERS:

To Sundry persons, for services as regular officers	\$79,387 96	
Sundry persons, for services as special officers, July 4th	273 37	
Sundry persons, for services as matron, drivers, etc	3,164 84	
	<hr/>	82,826 17

Paid for FUEL:

To Appropriation for Roads and Bridges, for teaming and labor,	\$25 00	
Appropriation for Reserved Fund, for coal	261 17	
Appropriation for Paupers, for wood,	5 50	
Connors Bros, for coal	59 00	
William E. Livingstone, for coal	398 59	
	<hr/>	749 26

Paid for SUNDRIES:

To Appropriation for Fire Department, for material and labor on signal system	\$212 10	
Appropriation for Water Works, for water	392 25	
Lowell Gas Light Co., for gas and rent of range	515 16	
Lowell Electric Light Corp., for lights	11 29	
	<hr/>	
<i>Amounts carried forward</i>	\$1,130 80	\$88,196 39

Amounts brought forward..... \$1,130 80 \$88,196 39

Paid for SUNDRIES :

To New England Telephone & Telegraph Co., for service.....	176 39
New England Gamewell Co., for signal box, ribbon, paper, etc...	331 73
Wm. H. Anderson, for professional services in liquor cases.....	270 00
William G. Bumps, for conveyance of prisoners.....	4 20
Michael J. Burns, for car fares and labor.....	27 28
Peter Cawley, for conveyance of prisoners.....	32 70
J. G. Favor, for conveyance of prisoners.....	3 30
Charles Howard, for cash paid for labor on Police Telegraph, postage, express, etc.....	814 80
Daniel M. Hayes, for travelling expenses, etc.....	15 56
Charles Laflamme, for travelling expenses.....	7 10
George B. Palmer, for record book, and teaming.....	3 10
Howe Bros. & Co., for lumber.....	11 07
A. J. Howe, for ladder and reel.....	5 00
Bartlett & Dow, for hardware.....	34 17
Frederick Taylor Co, for hardware..	57
American Electrical Works, for wire.....	91 00
Beattie Zinc Works, for zinc.....	54 90
H R. Barker Manufacturing Co., for pipes, fittings, packing, labor, etc.....	7 69
Cornelius Callahan Co., for gong striker.....	14 00
J. J. Cluin, for clock and repairing..	6 30
Eastern Electric Light & Storage Battery Co., for wire and labor,	8 34
T. Costello & Co., for plugs and hooks.....	66
L. G. Hall & Co., for repairing battery.....	1 28
William McLarney & Co., for pipe, fittings and labor.....	40 80

Amounts carried forward..... \$3,092 74 \$88,196 39

Amounts brought forward..... \$3,092 74 \$88,196 39

Paid for SUNDRIES:

To Pettingell Andrews Co., for wire, hooks, okenite, etc.....	307 18
Pevey Bros., for zincs.....	78 40
Rice & Co., for screens and window guards.....	12 83
Harry Raynes, for thermometer....	1 00
O. A. Richardson, for keys.....	65
C. Zimmer, for springs, bolts, labor, etc.....	16 90
Washburn & Moen Manufacturing Co., for wire.....	243 99
H. H. Wilder & Co., for brackets, zinc, labor, etc.....	18 90
G. A. Andrews, Agt., for cresole...	2 00
G. J. & D. Bradt, for crackers.....	67 50
Buttrick & Co., for sugar, coffee, salt, etc.....	164 85
Fred L. Barrows, for milk.....	18 00
C. B. Coburn & Co., for oil, am- monia, soap, pails, brushes, etc.,	70 93
B. F. Early, for signs.....	4 25
Spencer & Co., for signs.....	2 00
Daniel Gage, for ice.....	73 65
C. W. Learned, for insect powder..	16 25
Lowell Rubber Co., for hose, coup- lings, etc.....	2 30
Francis McClory, for sundries.....	1 00
John Ryan & Co, for rubber hose..	50
Pulsifer Chemical Co., for liniment..	5 00
Smith & Goold, for lotion.....	1 50
Talbot Dyewood and Chemical Co., for vitrol, salamoniac, etc.....	127 56
George F. Dyar, for carrots.....	10 84
H. O. Keyes, for hay.....	19 80
Joseph Miller, for hay and oats.....	88 12
E. S. Sherman & Co., for oats, hay and straw.....	119 31
F. B. Trull, for hay.....	19 36
Jesse N. Trull, for hay.....	37 30
William H. Wiggin, for hay.....	76 47
E. N. Wood & Co., for oats, stand- ard food. etc.....	274 95
Butterfield Printing and Binding Co., for blank books.....	51 50

Amounts carried forward..... \$5,027 53 \$88,196 39

Amounts brought forward..... \$5,027 53 \$88,196 39

Paid for SUNDRIES:

To H. C. Church & Son, for diaries....	66 00
Thomas Groom & Co., for ink.....	6 00
Thomas H. Lawler, for diaries and stationery.....	69 60
J. Merrill & Son., for directories and stationery.....	9 25
Louporet's Studio, for photographs... ..	10 00
Morning Mail Co., for blank books ..	34 25
Pulsifer, Jordan & Co., for signal roll,	9 18
Sampson, Murdock & Co., for New England directory.....	6 00
Taylor Bros., for diaries, stationery, etc.....	37 37
George H. Walker & Co., for atlas..	15 00
The Baker Patent Telephone Index and Tablet Co., for index.....	2 50
Samuel O. Aborn, for helmets and shoulder straps.....	41 60
J. L. Chalifoux, for satchel and strap,	3 65
Middlesex Company, for cloth... ..	752 54
Derby & Kilmer Desk Co., for desk,	16 00
A. L. Kittredge & Co, for paper and labor.....	6 13
Offutt & Whittaker, for pulley, cord and labor.....	2 40
J. F. Puffer & Son, for furniture ...	29 28
Middlesex Steam Laundry, for laun- dering.....	8 35
S. C. Mussey, for laundering.....	5 10
Scripture's Laundry, for laundering,	2 75
T. M. Bolton, for repairing harness..	2 75
E. P. Bryant, for blacksmithing....	6 50
Robert Barris, for use of wagon....	6 00
Cahill Bros., for shoeing.....	47 55
Charles Clapp, for horse and differ- ence in exchange of horses....	325 00
J. C. Donovan, for harness and re- pairing.....	62 40
Daniel J. Murphy, for difference in horses exchanged.....	100 00
H. F. Ebert, for oil and repairing harnesses.....	8 75
Fay Bros. & Hosford, for repairing carriages.....	69 35

Amounts carried forward..... \$6,788 78 \$88,196 39

Amounts brought forward..... \$6,788 78 \$88,196 39

Paid for SUNDRIES:

To Fay Bros., for repairing carriages...	54 87	
Charles Hill, for repairing carriages,	95	
M. V. B. Libbey, for shoeing.....	59 15	
Sawyer Carriage Co., for patrol wagon and repairing....	454 75	
Andrews & Wheeler, for labor on signal system.....	1 60	
P. Conlon, for mason work and material.....	46 75	
Johannah Doyle, for labor.....	367 00	
Charles H. Ricker, for professional services	14 00	
Fred A. Fox, for cleaning vaults...	25 65	
Stanton & Thurston, for watering streets	14 00	
Chase & Hunton, for carriage hire..	13 68	
C. H. Hanson, for teaming.....	17 50	
Charles E. Wilson, for use of wagon,	30 00	
American Express Co., for transportation	1 20	
Boston & Maine Railroad, for transportation	25	
Boston & Maine Railroad, Southern Division, for transportation....	3 32	
Boston & Maine Railroad, Lowell System, for transportation.....	3 01	
	<hr/>	7,896 46
		<hr/> <hr/> \$96,092 85

FIRE DEPARTMENT.

Balance undrawn Jan. 1, 1891.....	\$126 85	
Appropriation.....	80,000 00	
	<hr/>	\$80,126 85

RECEIPTS:

Received into the Treasury on account
of FIRE DEPARTMENT:

From Appropriation for Police, for labor and material on signal system,	\$212 10	
Appropriation for Sewers and Drains, for hose	7 50	
Appropriation for Water Works, for use of steamer and labor,	49 75	
W. T. Bradley, for overdraft	23 12	
H. R. Barker Manufacturing Co., for old copper.....	70 30	
C. Callahan & Co., for old hose carriage.....	150 00	
E. S. Hosmer, for cash received for cloth, hose, horse, etc....	757 08	
New England Telegraph & Tele- phone Co., for bells	42 00	
Commissioners of Sinking Funds, on loan.....	10,000 00	
Lowell Institution for Savings, on loan	17,000 00	
	<hr/>	28,311 85
Transferred from Reserved Fund.....		15,058 03
		<hr/> <hr/>
		\$123,496 73

EXPENDITURES.

Paid CHIEF ENGINEER AND ASSISTANT ENGINEERS:

To Edward S. Hosmer, Chief Engineer, salary	\$1,500 00	
James F. Norton, First Assistant Engineer and Clerk, salary	325 00	
H. W. Burton, Assistant Engineer, salary	275 00	
Edward Meloy, Assistant Engineer, salary	275 00	
George F. Salmon, Assistant Engineer, salary	275 00	
	<hr/>	\$2,650 00

Paid for SERVICES OF FIREMEN:

To Sundry persons, for services as Permanent Firemen	\$55,568 52	
Sundry persons, for services as Call Firemen	15,425 00	
	<hr/>	70,993 52

Paid for FUEL:

To Appropriation for Roads and Bridges, for teaming coal	\$33 46	
Appropriation for Paupers, for wood,	45 75	
Appropriation for Reserved Fund, for coal	282 05	
William Kittredge Co., for coal	98 25	
William E. Livingston, for coal	1,301 07	
	<hr/>	1,760 58

Paid for HAY, GRAIN, ETC.:

To Aime & Co., for standard food	\$16 20	
J. Edward Burns, for carrots	40 60	
J. B. Cover & Co., for oats, corn, hay, straw, salt, etc	453 75	
G. M. Foster, for hay and straw	687 05	
William P. Foye, for hay, straw and oats	618 65	
William E. Livingston, for oats, meal, straw, etc	792 78	
T. J. McDonald, for hay, straw, oats, salt and shorts	1,871 57	
	<hr/>	
<i>Amounts carried forward</i>	\$4,480 60	\$75,404 10

<i>Amounts brought forward</i>	\$4,480 60	\$75,404 10
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Paid for HAY, GRAIN, ETC.:

To Joseph Marin, for hay	182 48	
A. G. Stiles & Co., for hay, straw, oats, etc.....	312 74	
E. N. Wood & Co., for oats, salt, shorts, etc.....	126 83	
	<hr/>	5,102 65

Paid for HORSES, CARRIAGES,
HARNESSES, ETC.:

To Charles Clapp, for horses and ex- change of horses.....	\$375 00	
Charles H. Hanson, for horses and exchange of horses.....	960 00	
Robert Barris, for repairing har- nesses	14 45	
Charles E. Berry, for hames, collar, etc.....	110 60	
A. L. Butman, for repairing har- ness.....	34 40	
A. H. Cluer, for repairing harness..	20 70	
Dyer & Patterson, for celluloid rings,	75	
J. C. Donovan, for harness and re- pairing.....	131 90	
H. F. Ebert, for brushes and repair- ing harnesses.....	166 93	
Chas. H. Hanson, for blankets, brushes, etc.....	96 89	
A. S. Jackson, for brushes, dusters, hooks, etc.....	87 00	
A. R. Wells, for holdback and breeching.....	12 00	
F. J. Burlingham, for whips.....	16 00	
Abbott Downing Co., for wheels and axles.....	50 00	
E. P. Bryant, for repairing carriages,	342 07	
Fay Bros., for repairing carriages...	976 15	
Fay Bros. & Hosford, for repairing carriages	62 47	
Edward E. Hill, for repairing carri- ages	5 50	
S. F. Haywood & Co., for steering wheel for truck.....	15 00	
	<hr/>	
<i>Amounts carried forward</i>	\$3,477 81	\$80,506 75

<i>Amounts brought forward</i>	\$3,477 81	\$80,506 75
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Paid for HORSES, CARRIAGES,
HARNESSES, ETC.:

To Manchester Locomotive Works, for repairing hose carriage, etc.....	79 50	
Sawyer Carriage Co., for wagon and repairing carriages.....	678 22	
J. H. Swett, for wagon and repair- ing carriages.....	341 30	
Fred Arlin, for clipping horse.....	3 00	
	<hr/>	4,579 83

Paid for EQUIPPING NEW EN-
GINE HOUSES:

To Charles Clapp, for horses (Law- rence street).....	\$425 00	
Cornelius Callahan Co., for hose (Lawrence Street).....	955 50	
Charles H. Hanson, for horses (Paw- tucketville).....	450 00	
Cornelius Callahan Co., for hose (Pawtucketville).....	955 50	
	<hr/>	2,786 00

Paid for SUNDRIES :

To Appropriation for Public Buildings, for enameled cloth.....	\$1 05	
Appropriation for Water Works, for water.....	10,617 50	
New England Telephone & Tele- graph Co., for service.....	402 04	
Lowell Gas Light Co., for gas.....	842 82	
Lowell Electric Light Corporation, for power.	22 83	
New England Gamewell Co., for fire- alarm boxes, gongs, wire, insula- tors, battery jars, etc.....	897 24	
Otis Allen & Son, for moulding.....	1 50	
A. L. Brooks & Co., for lumber....	21 23	
Milton Aldrich, for ladder rounds..	2 16	
Burnham, Forrest & Davis, for lumber.....	46 83	
Burnham & Davis, for lumber.	1 88	
	<hr/>	
<i>Amounts carried forward</i>	\$12,857 08	\$87,872 58

Amounts brought forward..... \$12,857 08 \$87,872 58

Paid for SUNDRIES :

To Mark Holmes, Jr. & Son, for lumber and labor.....	9 00
Howe Bros. & Co., for lumber.....	1 66
J. H. Murray, for chestnut posts....	153 50
Amasa Pratt & Co., for lumber.....	100 73
Charles E. Adams, for hardware and paint	11 70
Bartlett & Dow, for hardware.....	48 68
Boutwell Bros., for iron and steel...	11 76
Callahan & Sanborn, for hardware and tools.....	3 02
A. Fenton, for hardware and rope..	1 79
A. F. Nichols, for casting	42
Pevey Bros., for castings and zincs...	315 97
Rollins & Son, for hardware.....	18 68
H. B. Shattuck, for hardware.....	12 47
Frederick Taylor Co., for hardware,	102 31
Ætna Rubber Mills, for insulated covers.....	295 00
J. J. Adams, for filing saws.....	2 02
B. G. Brown, for labor	5 00
H. R. Barker Manufacturing Co., for pipe, fittings, labor, etc....	191 79
T. Costello & Co., for basin and urinal.....	17 00
W. W. Carey, for shaft, couplings and pulleys.....	29 05
Cornelius Callahan Co., for snaps, hose, rubber pipe, etc.....	1,655 50
Durant & Rogers, for buttons, badges and repairing.....	62 40
Frank H. Derby, for repairing battery cells, wire, etc	41 36
Eastern Electric Light and Storage Battery Co., for battery cells and rubber.....	5 25
Josiah Gates & Sons, for hose, nozzle, couplings, leather, etc.....	91 78
Hill, Clark and Langtry, for lathe..	235 00
L. G. Hall & Co., for wire.....	1 00
A. Hallowell, for wire, castings and labor	7 16
S. H. Jones, for gong, chain, burners, fittings, etc	71 31

Amounts carried forward..... \$16,359 39 \$87,872 58

Amounts brought forward \$16,359 39 \$87,872 58

Paid for SUNDRIES :

To Joel Knapp & Son, for iron, steel, bolts and labor	12 32
Alvin Lawrence, for clock and re- pairing	10 00
A. I. Laughton, for bolts, galvanized iron, labor, etc.	7 12
Lowell Steam Boiler Works, for cast- ings and labor	4 71
Lowell Rubber Co., for packing	1 93
W. A. Mack & Co., for ash cans, dippers, tunnel, soda can, gal- vanized iron, labor, etc	63 06
Rice & Co., for strainer	2 80
E. E. Sargent, for extension belt, repairing bell, etc.	12 00
Scannell & Wholey, for repairing boiler	6 00
Thomson Houston Motor Co., for motor, brushes, etc.	257 50
Union Plating Manufacturing Co., for plating	14 95
Union Iron Foundry Co., for cast- ings	4 68
H. H. Wilder & Co., for dredge box, ash hods, etc.	10 10
C. Zimmer, for keys, fitting, etc. . . .	3 40
O. E. Averill, for shoeing horses . . .	53 72
Cahill Bros., for shoeing horses . . .	237 45
M. V. B. Libbey, for shoeing horses, W. H. Choate, for blacksmithing . .	142 00
John J. Donnelly, for shoeing horses, Lowell Standard Cab and Hack Co., for blacksmithing	9 15
A. Parsons, for blacksmithing	14 35
T. J. Reynolds, for shoeing horses . .	17 95
C. C. Thompson, for shoeing horses, blacksmithing, etc.	130 86
Welch & Donlon, for shoeing horses, G. C. Braxnear, for insignia	4 00
W. T. Bradley, for bed, spring, rug, chairs, etc.	199 16
John Cross, for canvas spreads	95 09
M. J. Fahey, for box, quilts, towels, sheeting, etc.	11 25
	90 26
	6 00
	47 79

Amounts carried forward \$17,828 99 \$87,872 58

Amounts brought forward..... \$17,828 99 \$87,872 58

Paid for SUNDRIES :

To E. Hapgood & Son, for mattresses..	36 69
L. W. Hawkes & Co., for beds, mattress, etc	212 88
Jordan & Christie, for brushes.....	20 00
A. L. Kittridge, for brackets.....	30
Lowell Rubber Co., for gaskets and stoppers	2 87
Lowell Steam Carpet Cleaning Works, for cleaning carpets...	10 55
Alphonse Monier, for crash, cotton cloth, blankets, etc.....	54 41
Middlesex Company, for cloth.....	442 46
Middlesex Steam Laundry, for laundering	107 43
E. F. Page & Co., for brooms.....	55 22
J. F. Puffer & Son, for mats, burners, cooler, cuspidores, etc.....	9 85
Daniel W. Pepper, for fronts for engineers' hats.....	6 00
Scripture's Steam Laundry, for laundering	12 13
Carleton & Hovey, for sweet spirits nitre	75
C. B. Coburn & Co., for oil, cord, rope, waste, potash, shellac, baskets, etc.....	474 43
P. M. Carpenter & Co., for toilet paper	10 00
A. C. Daniels, for medicine.....	30 00
J. Hinman, for bottles and fire extinguisher	30 00
Austin Keith, for medicine.....	5 00
Lowell Rubber Co., for cement, repairing hose, etc.....	7 20
Warren B. Plympton, for polish....	3 25
George B. Palmer, for oil.....	2 50
Pulsifer Chemical Co., for healer....	16 00
H. O. Stevenson, for soap and medicines	66 50
Simpson & Rowland, for matches...	42 75
W. H. Spalding & Co., for paste, shades, paper, hanging, etc.....	66 30

Amounts carried forward....., \$19,554 46 \$87,872 58

Amounts brought forward..... \$19,554 46 \$87,872 58

Paid for SUNDRIES:

To Spencer & Co., for signs.....	1 40
Smith & Goold, for lotion.....	3 00
Talbot Dyewood & Chemical Co., for vitriol, ammonia, bi-carbonate soda, etc.....	608 64
The Noyes Manufacturing Co., for hoof packing... ..	12 00
Darius Whithed, for soap.....	91 95
S. H. Weaver & Son, for repairing roof.....	4 00
J. F. McCoy, for refreshments.....	17 00
McEachran & Travers, for refresh- ments.....	14 00
F. E. Putnam, for refreshments.....	2 50
Richardson's Hotel, for refreshments,	5 40
H. C. Church & Son, for stationery,	33 25
J. Merrill & Son, for paper, blank books, etc.....	7 75
A. H. Sanborn, for photographs....	27 00
Vox Populi Press, for badges, print- ing, etc.....	16 75
E. S. Hosmer, for travelling expenses, postage, etc.....	277 07
James F. Norton, for services as Chief Engineer.....	49 20
Adolphe Benard, for damage to wagon.....	54 00
James McKinley, for damage to wagon.....	110 00
A. W. Baker, for veterinary dentis- try.....	36 00
J. H. Sparks, for professional ser- vices.....	4 00
W. A. Sherman, for professional ser- vices.....	1 50
Jesse A. Viles, for professional ser- vices.....	59 00
Robert Wood, for professional ser- vices.....	30 00
H. B. Welles, for veterinary dentis- try.....	84 00
Staples Bros., for dualin, exploders, labor, etc.....	11 50
Charles Clapp, for use of horse.....	25 00

Amounts carried forward..... \$21,140 37 \$87,872 58

Amounts brought forward.... . \$21,140 37 \$87,872 58

Paid for SUNDRIES:

To C. H. Hanson, for use of horses....	118 00	
Morse & Sparks, for carriage hire...	20 00	
Fred W. Jenness, for pasturing horses.....	35 00	
George H. Tryder, for use of horse..	6 00	
James F. O'Donnell, for carriage hire	10 50	
Alphonso Merrill, for teaming.....	2 50	
American Express Co., for transpor- tation.....	16 70	
Boston & Lowell Express Co., for transportation.....	75	
Lovejoy-Paul Express Co., for trans- portation.....	3 25	
New Englang Despatch Express Co., for transportation.....	1 65	
Northern Express Co., for transpor- tation	2 95	
Boston & Maine Railroad, Lowell System, for transportation.....	4 44	
Boston & Maine Railroad, for trans- portation.....	3 72	
Boston & Maine Railroad, Western Division, for transportation....	2 10	
Boston & Maine Railroad, Southern Division, for transportation.....	42 22	
	<hr/>	\$21,410 15
Total expenditure for the year 1891.....		\$109,282 73
Balance undrawn (New Apparatus).....		14,214 00
		<hr/>
		\$123,496 73
		<hr/>

SEWERS AND DRAINS.

Appropriation	\$20,000 00	
	<hr/>	\$20,000 00

RECEIPTS.

Received into the Treasury on account
of SEWERS AND DRAINS:

From Appropriation for Roads and Bridges, for brick.....	\$84 19	
Appropriation for Commons, for pipe, labor and engineering..	391 78	
Appropriation for Pawtucket Bou- levard, for freight.....	17 76	
Horace P. Beals, for sale of brick and stone.....	113 37	
W. H. Harrigan, for overdraft....	7 00	
A. F. Nichols, for old iron.....	13 46	
Lowell Institution for Savings, on loan	50,000 00	
	<hr/>	50,627 56

Received for REMOTE DRAINAGE:

From Oblate Fathers, Andrews Street..	\$22 75	
Rose Guyton, Aiken Avenue.....	25 00	
Jacques Boisvert, Aiken Avenue.	21 65	
Freeman W. Hill, Bridge Street..	18 50	
A. F. Nichols, Broadway.....	22 00	
Bridget Conners, Broadway.....	7 16	
August Fels, Beaver Street.....	28 13	
Mary P. Read, Central Street....	23 35	
George E. King, Coburn Street ..	25 00	
Proprietors of Locks & Canals, Dummer Street.....	50 00	
Appropriation for School-houses, Dummer Street.....	77 97	
	<hr/>	
<i>Amounts carried forward.....</i>	\$321 51	\$70,627 56

Amounts brought forward..... \$321 51 \$70,627 56

Received for REMOTE DRAINAGE:

From Thomas Nesmith, Dalton Street..	8 10
L. F. Kelly, Dalton Street.....	12 12
Highland Club, Edson Street.....	74 20
Daniel Swan, East Merrimack Street.....	7 25
John H. King, Fayette Street....	24 09
John Boyle, Fayette Street.....	34 75
Coleman O'Loughlin, Fayette Street	20 94
J. C. Donovan, Fayette Street....	13 65
Mrs. C. S. McCurdy, Fifth Street,	13 14
A. K. Pierce, Frye Street.....	26 40
Charles and Dorcas Osgood, Gor- ham Street.....	37 50
St. Peter's Church, Gorham Street,	87 71
Ann Farrell, Gorham Street.....	31 50
James Baker, Howard Street....	15 72
J. C. Irish, Hanks Street.....	33 96
George Ingham, Lincoln Street...	30 00
Mary McLaughlin, Lawrence Street.....	12 00
Oliver Lord, Merrimack Street,	50 47
Davis & Sargent, Marginal Street,	5 28
W. A. Ingham, Marginal Street..	80 00
Jacob Murphy, New Nichols Street	26 44
Alfred Bibeault, Perkins Street...	25 00
Barrett Bros., Salem Street.....	7 00
William A. Ingham, Stevens Street	75 00
Charles E. Watson, Stevens Street,	25 00
Boston & Maine Railroad, West- ern Avenue.....	25 00
John G. Sherburne, Western Avenue	44 07
John G. Sherburne, Western Ave- nue and Fletcher Street.....	3 81
Burnham & Davis, Western Ave- nue.....	5 18
Edward H. Morse, Woodward Avenue	25 00
George D. Furber, Westford Street	7 75
Jesse N. Bassett, Westford Street,	35 97

Amounts carried forward..... \$1,245 51 \$70,627 56

<i>Amounts brought forward.....</i>	\$1,245 51	\$70,627 56
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Received for REMOTE DRAINAGE,

From L. R. J. & D. H. Varnum, West Fourth Street.....	43 50	
Kitson Machine Co., Worthen Street.....	23 21	
George L. Fowler, Ward Street..	28 97	
Daniel Gage, Wilder Street... ..	35 00	
	<hr/>	1,376 19

Received for SEWER ASSESS-
MENTS:

From Sylvester A. Jones, A Street....	\$63 20	
Anthony D. Mitten, A Street.....	2 90	
James S. Somerset, A Street.....	31 60	
Sarah J. Wood, A Street.....	31 60	
G. H. Vanyolkenberg, B Street...	26 44	
Sasan J. Melvin, Blossom Street..	8 14	
Jesse Sherman, Blossom Street...	8 14	
George Durant, Blossom Street...	16 04	
George H. Harris, Blossom Street,	9 87	
George Harris, Blossom Street...	24 68	
Daniel Mills, Blossom Street.....	7 40	
James R. Commerford, Blossom Street.....	8 64	
Michael Linane, Blossom Street...	9 38	
Michael Linane, Blossom Street...	7 65	
Michael Linane, Blossom Street...	7 65	
George Popplewell, Blossom Street,	8 14	
James G. Marshall, Blossom Street,	24 68	
John J. Donnelly, Blossom Street,	12 34	
William H. Baldwin, Blossom Street.....	12 35	
Clement Dawson, Blossom Street,	7 40	
James Carney, Boylston and Con- cord Streets.....	22 50	
Charles E. Carter, Chester Street,	12 84	
Charles E. Carter, Chester Street,	13 97	
Charles E. Carter, Chester Street,	13 00	
George F. Penniman, Corner Street.....	18 93	
George F. Penniman, Corner Street.....	18 93	
George F. Penniman, Corner Street.....	18 93	
	<hr/>	
<i>Amounts carried forward</i>	\$447 34	\$72,003 75

<i>Amounts brought forward.....</i>	\$447 34	\$72,003 75
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Received for SEWER ASSESS-
MENTS:

From George F. Penniman, Corner Street.....	18 93
C. T. Chamberlin, Decatur Street,	25 32
Willard A. Brown, Decatur Street,	22 18
Samuel W. Preston, Decatur Street,	15 43
William S. McIntyre, Decatur Street.	12 59
Lowell Machine Shop, Dutton and Kitson Streets.....	91 60
Lowell Machine Shop, Dutton and Kitson Streets.....	55 34
Lowell Machine Shop, Dutton and Kitson Streets.....	36 85
Lowell Machine Shop, Dutton and Kitson Streets.....	30 00
Lowell Machine Shop, Dutton and Kitson Streets.....	28 95
Lowell Machine Shop, Dutton and Kitson Streets.....	28 30
Kitson Machine Co., Dutton, Kit- son and Worthen Streets....	133 41
Kitson Machine Co., Dutton, Kit- son and Worthen Streets....	16 61
P. & F. Mollahan, Gorham Streets,	425 64
George F. Penniman, Harding and Warwick Streets	37 51
George F. Penniman, Harding and Warwick Streets.....	37 51
George F. Penniman, Harding and Warwick Streets	33 34
George F. Penniman, Harding and Warwick Streets.....	44 18
George F. Penniman, Harding and Warwick Streets.....	43 82
George F. Penniman, Harding and Warwick Streets.... .	43 45
George F. Penniman, Harding and Warwick Streets.....	43 09
George F. Penniman, Harding and Warwick Streets.... .	42 71
George F. Penniman, Harding and Warwick Streets.....	42 00

<i>Amounts carried forward</i>	<u>\$1,756 10</u>	<u>\$72,003 75</u>
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Amounts brought forward..... \$1,756 10 \$72,003 75

Received for SEWER ASSESS-
MENTS:

From George F. Penniman, Harding and Warwick Streets.....	41 62
George F. Penniman, Harding and Warwick Streets.....	53 51
George F. Penniman, Harding and Warwick Streets.....	33 34
George F. Penniman, Harding and Warwick Streets.....	37 51
George F. Penniman, Harding and Warwick Streets.....	37 51
George F. Penniman, Harding and Warwick Streets.....	33 34
Edward W. Pease, Harding and Warwick Streets.....	33 34
Joseph B. Conklin, Harding and Warwick Streets.....	42 36
James B. Gilman, Harding and Warwick Streets.....	33 34
Lizzie G. Smith, Harding and Warwick Streets.....	48 96
Edward W. Pease, Harding and Warwick Streets.....	33 34
Charles H. Andrews, Harding and Warwick Streets.....	40 90
Charles H. Andrews, Harding and Warwick Streets.....	41 26
Nellie F. Brooks, Harding and Warwick Streets.....	46 68
Hannah E. Healey, Harding and Warwick Streets.....	40 54
Thomas F. Burgess, Haseltine Street.....	17 66
Anthony D. Mitten, Haseltine Street.....	9 35
Daniel Gage, June Street.....	12 49
L. R. J. & D. H. Varnum, June Street.....	10 17
L. R. J. & D. H. Varnum, June Street.....	40 48
L. R. J. & D. H. Varnum, June Street.....	10 00
Joseph B. Hopkins, June Street..	13 73

Amounts carried forward..... \$2,467 53 \$72,003 75

Amounts brought forward..... \$2,467 53 \$72,003 75

Received for SEWER ASSESS-
MENTS:

From Est. Henry F. Durant, June Street,	27 46
Est. Henry F. Durant, June Street,	5 49
Mark Stearns, June Street.....	13 73
William W. Rock, Lincoln Street,	13 10
Herbert H. Wise, Lincoln Street,	8 61
John Pearson, Lincoln Street....	98 89
City Institution for Savings, Lin- coln Street.....	13 23
Adams W. Sweetser, Lincoln Street.....	14 20
Mrs. J. P. Dudley, Lincoln Street,	29 57
David Nichols, Marlborough Street,	20 90
John & P. H. Ryan, Marlborough Street.....	16 72
Louisa M. Crosby, Marlborough Street.....	12 75
Mary B. Smith, Marlborough Street.....	16 62
Thomas F. Burgess, Mason Street,	73 65
Thomas F. Burgess, Mason Street,	105 00
Frederick A. Bates, Mammoth Road	37 19
Henry L. Newhall, Mammoth Road	40 28
Eliza F. Park, Mammoth Road...	61 05
Appropriation for School-houses, Mammoth Road.....	76 85
L. R. J. & D. H. Varnum, May Street	84 13
L. R. J. & D. H. Varnum, May Street	20 40
L. R. J. & D. H. Varnum, May Street	20 53
Joseph S. Upton, May Street....	34 32
Mrs. James S. Hovey, May Street,	21 87
J. Frank Puffer, May Street.....	51 25
William E. Livingston, May Street,	15 23
William E. Livingston, May Street,	13 80
George H. Smith, May Street....	12 68
Martin Maguire, Mead Street....	51 50
John Monohan, Mead Street.....	3 96
Barth Sheehan, Mead Street.....	21 01

Amounts carried forward..... \$3,503 50 \$72,003 75

Amounts brought forward..... \$3,503 50 \$72,003 75

Received for SEWER ASSESS-
MENTS:

From Robinson Ernschaw, Mead Street..	21 88
Patrick Hunt, Manchester Street,	14 60
James Mahan, Manchester Street,	46 96
James Mahan, Manchester Street,	14 60
Patrick Conroy, Manchester Street,	21 90
Lowell & Andover Railroad, Man- chester Street.....	33 07
Patrick Mahan, Manchester Street,	43 80
Chas. T. Fish, New School Street,	9 63
Melvin J. Brown, New School Street	10 07
Laura F. Adams, New School Street	12 08
Jennie M. Hoyt, New School Street	10 57
Jennie M. Hoyt, New School Street	10 57
Jennie M. Hoyt, New School Street	10 02
Est. Utley & Boynton, New South Walker Street.....	26 81
Addison P. Varnum, New South Walker Street.....	16 10
Addison P. Varnum, New South Walker Street.....	16 10
John J. and R. Morrissey, New South Walker Street.....	26 81
G. H. and C. A. Gilman, Oakland Street	80 82
Anson Wheeler, Phillips Street...	18 85
George F. Hill, Phillips Street....	13 91
Mary D. Jordan, Phillips Street...	18 95
Ephraim Simonds, Sheldon and Royal Streets.....	41 74
Henry C. Brothers, Sheldon and Royal Streets.....	36 47
Est. Marie T. Stevens, Sheldon and Royal Streets.....	110 60
Henry C. Brothers, Sheldon and Royal Streets.....	54 31
Heirs Ezra Sheldon, Sheldon and Royal Streets.....	32 83

Amounts carried forward \$4,257 55 \$72,003 75

Amounts brought forward..... \$4,257 55 \$72,003 75

Received for SEWER ASSESS-
MENTS:

From Elizabeth Washburn, Sheldon and Royal Streets.....	30 25
Mrs. E. S. Hurd, Sheldon and Royal Streets....	34 90
Edward P. Sanborn, Sheldon and Royal Streets	43 10
Alice Murphy, Sheldon and Royal Streets.....	35 78
Frank H. Beharrel, Sheldon and Royal Streets.....	42 14
George H. Cole, Sheldon and Royal Streets.....	37 60
Emma D. Stone, Sheldon and Royal Streets.....	38 98
Mark Holmes, Jr., & Son, Sheldon and Royal Streets.....	40 35
William J. Gilman, Sheldon and Royal Streets.....	44 02
Caroline F. Bissell, School Street,	48 83
Edgar E. Linnell, South Walker Street	17 43
William Kelly, South Walker Street	15 50
Daniel H. Reynolds, South Walker Street	17 43
Est. George L. Clark, South Walker Street.....	26 81
George F. Penniman, South Walker Street	17 43
George F. Penniman, South Walker Street.....	15 04
George F. Penniman, South Walker Street	68 39
Mary Lee, South Walker Street..	16 50
Daniel Wholey, White Street....	78 54
Marshall P. Ranger, White Street,	25 05
Sylvanus Mitchen, Ware Street...	32 61
Herbert F. Barnes, Ware Street..	33 53
Herbert F. Barnes, Ware Street..	33 41
Herbert F. Barnes, Ware Street..	33 50
Letitia G. Gifford, Ware Street...	33 25
Charles E. Bedell, Ware Street...	33 19

Amounts carried forward..... \$5,151 11 \$72,003 75

<i>Amounts brought forward</i>	\$5,151 11	\$72,003 75
Received for SEWER ASSESS- MENTS:		
From Est. Maria F. Stevens, Ware Street,	33 24	
Est. Maria F. Stevens, Ware Street,	38 05	
Est. Maria F. Stevens, Ware Street,	47 05	
Est. Maria F. Stevens, Ware Street,	160 78	
Est. David Field, Westford Street,	30 00	
	<hr/>	5,460 23
Transferred from Appropriation for Im- provement in Andover Street Sewer System		541 22
		<hr/>
		\$78,005 20
		<hr/>

EXPENDITURES.

Paid for LABOR, AS PER PAY
ROLLS:

In January.....	\$891 37	
February.....	617 50	
March.....	595 56	
April.....	1,136 13	
May.....	4,422 69	
June.....	3,929 20	
July.....	4,511 46	
August.....	6,479 00	
September.....	6,107 22	
October.....	8,424 39	
November.....	7,784 35	
December.....	5,674 42	
	<hr/>	\$50,573 29

Paid for PIPE, BRICK, CEMENT,
LUMBER, HARDWARE, ETC.:

To A. P. Bateman, for lumber.....	\$120 97	
Burnham, Forrest & Davis, for lumber.....	248 87	
Burnham & Davis, for lumber.....	13 82	
Davis & Sargent, for lumber....	930 83	
Mark Holmes, Jr., & Son, for lum- ber and labor.....	43 60	
Howe Bros. & Co., for lumber.....	468 44	
	<hr/>	
<i>Amounts carried forward</i>	\$1,826 53	\$50,573 29

Amounts brought forward..... \$1,826 53 \$50,573 29

Paid for PIPE, BRICK, CEMENT,
LUMBER, HARDWARE, ETC.:

To Amasa Pratt & Co., for lumber.....	878 99	
American Bolt Co., for bolts, wash- ers, labor, etc.....	59 80	
Bartlett & Dow, for hardware and tools.....	221 94	
Charles E. Adams, for hardware....	7 00	
J. C. Bennett, for hardware.....	25 49	
Boutwell Bros., for iron, steel, axles, spokes, etc.....	232 07	
Callahan & Sanborn, for hardware..	6 64	
Concord Foundry Co., for castings..	32 90	
A. F. Nichols, for castings.....	441 62	
Pevey Bros., for castings.....	349 45	
H. B. Shattuck, for hardware and tools.....	103 40	
Frederick Taylor Co., for tools, hardware, etc.....	25 33	
George H. Sampson, for nuts, bolts, and springs.....	30 85	
Charles I. Taylor & Co., for plunger,	75	
Union Iron Foundry Co., for cast- ings.....	8 76	
George W. Anderson, for brick....	2,417 77	
J. W. Bennett & Co., for tarred paper.....	3 27	
Connors Bros., for brick, cement, sand and lime....	469 26	
Edward Cawley, for drain pipe, etc.,	2,358 76	
C. J. Cheney, Jr., for drain pipe, etc.,	2,577 85	
Howard & Wilson, for brick.....	94 93	
Ingham & Bradbury, for catch basin, Church Street.....	150 00	
Charles A. Kendall, for pipe.....	10 04	
Lowell Steam Boiler Works, for pipe,	29 55	
William E. Livingston, for brick, cement, lime, etc.....	2,506 63	
Middleburgh Blue Stone Co., for stone....	595 83	
Pedine Morrell, for brick.....	268 62	
Staples Bros., for pipe, grates, etc...	2,185 42	
E. A. & A. T. Smith, for concrete..	4 25	
		17,923 70
<i>Amount carried forward</i>		\$68,496 99

Amount brought forward..... \$68,496 99

Paid for SUNDRIES :

To Appropriation for Roads and Bridges, for services of City Engineer, Superintendent of Streets, labor, keeping horses, etc.....	\$1,744 52
Appropriation for Pawtucket Boule- vard, for tools.....	50 00
Appropriation for Paupers, for wood,	2 00
Appropriation for Fire Department, for hose	7 50
Appropriation for Public Buildings, for labor.....	63
Appropriation for Water Works, for water, pipe, wagon, etc.....	585 34
Patrick F. Brady, for labor and material, Merrimack Street.....	1,228 10
C. J. Cheney, Jr., for constructing sewer in Blossom Street (balance).....	25 00
C. J. Cheney, Jr., for constructing sewer in June Street (balance),	328 96
New England Telephone & Tele- graph Co., for service	49 50
H. R. Barker Manufacturing Co., for pipe, fittings and labor.....	55 52
C. J. Cheney, for hoisting machine..	50 00
Edson Manufacturing Co., for suction hose, cross bars, diaphragms....	183 91
Eastern Electric Light & Storage Battery Co., for wire	2 60
Austin Grover, for stamps and brand- ing iron.....	4 50
Joel Knapp & Son, for steel and labor,	9 71
Daniel Lovejoy, for iron.....	21 19
W. A. Mack & Co., for pails, covers, dippers, etc.....	3 15
A. Nourbourn, for gears and repair- ing hoisting jack.....	10 67
Nason B. Parsons, for filing saws...	8 31
Perrin, Seamans & Co., for pump, strainer, bolts, washers, etc.....	201 49
Rice & Co., for wire cloth.....	2 63
O. A. Richardson, for repairing tapes,	1 75
H. H. Wilder & Co., for dippers, covers, etc.....	22 22

Amounts carried forward..... \$4,599 20 \$68,496 99

<i>Amounts brought forward</i>	\$4,599 20	\$68,496 99
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Paid for SUNDRIES:

To C. Zimmer, for sharpening saws.....	45
Carleton & Hovey, for paste.....	50
C. G. Coburn, for pails	75
C. B. Coburn & Co., for oil, hose, pail, packing, etc.....	184 51
A. H. Cluer, for blanket... ..	6 50
James Donohue, for barrels.....	3 00
Donovan & Co., for forcite, ex- ploders, etc.....	450 44
Gray Bros., for salt	1 15
William Kittredge Co., for coal.....	222 04
A. H. Kittredge, for dualin and fuse,	121 00
L. F. Kittredge, for rope matting...	12 20
Joseph Miller, for salt and oatmeal,	46 05
William Nichols & Co., for powder and salt.....	27 60
J. F. Puffer & Son, for globes, lanterns, etc.	61 52
A. L. Ready, for bagging and canvas,	16 74
W. H. Spalding & Co., for ink, pen- cils and paper.....	2 75
A. P. Varney, for glass and labor...	2 00
A. K. Wellington, for powder.....	242 00
Boulger & McOsker, for rubber boots	54 75
Quinlan & Washburn, for rubber boots.....	9 00
Josiah Gates & Sons, for belt.....	40
Page Belting Co., for hose, strainer and couplings.....	69 40
F. P. Coggeshall, for bill file.....	1 00
Thomas H. Lawler, for blank books,	1 50
J. Merrill & Son, for paper.....	2 00
Taylor Bros., for pens and files.....	2 75
George Bowers, for postage and re- pairing tape.... .	1 25
George E. Evans, for horse car fares and repairing tape.....	85
F. W. Farnham, for horse car fares and repairing tape.....	14 60
William H. Harrigan, for travelling expenses	1 30
John H. Sparks, for professional services	2 00

<i>Amounts carried forward</i>	\$6,161 20	\$68,496 99
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<i>Amounts brought forward</i>	\$6,161 20	\$68,496 99
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Paid for SUNDRIES:

To Allen Buckminster, for rebate for remote drainage in South Walker Street.....	10 00	
Est. F. A. Hildreth, for constructing sewer in Dalton Street.....	363 70	
James Mahan, for rebate for remote drainage in Gorham Street.....	26 50	
Alice Murphy, for rebate for remote drainage in Royal Street.....	30 00	
L. R. J. & D. H. Varnum, for rebate for remote drainage in Twelfth Street	13 00	
J. U. Gage, for appraising damage to property of Emma N. White...	10 00	
W. E. Potter & Son, for appraising damage to property of Emma N. White.....	10 00	
Emma N. White, guardian, on execution.....	861 10	
B. G. Brown, for teaming.....	127 00	
C. H. Hanson, for teaming	38 00	
Morse & Sparks, for board and use of horse.....	108 00	
B. Riley, for teaming.....	90 00	
American Express Co., for transportation.....	2 00	
Lovejoy-Paul Express Co., for transportation	1 00	
Boston & Maine Railroad, Lowell System, for transportation.....	119 54	
Boston & Maine Railroad, Western Division, for transportation.....	10 50	
Boston & Maine Railroad, Southern Division	576 96	
	<hr/>	8,558 50
Total expenditure for the year 1891.....		\$77,055 49
Balance undrawn Dec. 31, 1891.....		949 71
		<hr/> <hr/>
		\$78,005 20

IMPROVEMENT IN ANDOVER STREET SEWER SYSTEM.

Appropriation	\$3,000 00	
	\$3,000 00	

EXPENDITURES.

Paid for SUNDRIES:

To Sundry persons, for labor, as per pay rolls	\$159 38	
Appropriation for Police, for services of officers	222 75	
P. F. Brady, for balance of contract,	308 44	
Edward Cawley, for balance of contract	1,766 31	
American Bolt Co., for bolts	1 00	
Boutwell Bros., for steel	90	
Total expenditure for the year 1891		\$2,458 78
Transferred to Appropriation of Sewers and Drains		541 22
		\$3,000 00

COMMONS.

Appropriation.....	\$8,000 00	
	<hr/>	\$8,000 00

RECEIPTS.

Received into the Treasury on account
of COMMONS:

From Michael J. Dowd, for rent of lots on South Common.....	\$615 00	
Avery Marshall, for rent of lots on South Common.	11 00	
Avery Marshall, for sale of horse and old material.....	66 00	
	<hr/>	692 00
Transferred from Reserve Fund.....		3,093 81
		<hr/>
		\$11,785 81
		<hr/> <hr/>

EXPENDITURES.

Paid for SUNDRIES AT FORT
HILL PARK:

To Sundry persons for labor as per pay rolls	\$2,647 27	
Appropriation for Water Works, for water	6 00	
James Slavin, for digging well, per contract	100 50	
J. B. Varnum, for balance due on contract, for spring house	23 00	
Bartlett & Dow, for tools and bulbs,	70 38	
Callahan & Sanborn, for tools.....	19 19	
T. Costello & Co., for pump, pipe, wrench, labor, etc.....	127 46	
W. A. Mack & Co., for castings and labor	26 05	
	<hr/>	
<i>Amount carried forward.....</i>	\$3,019 85	

Amount brought forward..... \$3,019 85

Paid for SUNDRIES AT FORT
HILL PARK:

J. S. Mosher, for sharpening drills,	3 29	
Edward Cawley, for manure, filling and labor.....	115 38	
E. N. Wood & Co for lawn dressing,	1 00	
McManmon & Walsh, for canvas...	15 00	
John Oliver, for plants.....	11 04	
E. Sheppard & Son, for plants.....	165 53	
Temple & Beard, for trees.....	27 50	
Sarah E. Webster, for plants.....	46 22	
F. J. Doherty, for signs.....	2 00	
Peter Sheehan, for horse car fares, teaming, etc.....	21 63	
James Mahan, for setting cap on in- dex.....	10 00	
Redmond Welch, for manure and teaming.....	103 00	
		<hr/> \$3,541 44

Paid for SUNDRIES:

To Sundry persons for labor as per pay rolls	\$3,471 55	
Appropriation for Roads and Bridges, for labor.....	62 45	
Appropriation for Sewers and Drains, for constructing sewer in North Common	391 78	
Appropriation for Public Buildings, for labor and material.....	26 03	
Appropriation for Water Works, for water.....	188 21	
Amos B. Adams, for chestnut posts,	18 90	
Burnham, Forrest & Davis, for lum- ber	95 63	
Burnham & Davis, for lumber.....	5 19	
Bartlett & Dow, for hardware, tools, etc	185 91	
J. C. Bennett, for ladder.....	4 13	
Callahan & Sanborn, for tools and seed	96 52	
A. L. Ready, for tools, rope, etc....	7 90	
Thomas Clark, for blacksmithing....	40 20	
H. J. Draper, for painting cart.....	14 00	
		<hr/>
<i>Amounts carried forward</i>	\$4,608 40	<hr/> \$3,541 44

<i>Amounts brought forward.....</i>	\$4,608 40	\$3,541 44
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Paid for SUNDRIES :

To Charles T. Haskell, for keys and filing saws.....	2 34	
I. O. Ramsdell, for repairing cart, labor, etc	25 65	
J. C. Donovan, for blankets and re- pairing harnesses.....	51 40	
T. Costello & Co., for hose, bands and washers.....	6 90	
S. H. Jones, for castings and repair- ing lawn mower.....	53 06	
Lowell Gas Light Co., for pipe.....	6 80	
P. J. Brady, for pails and oatmeal..	2 75	
D. W. Clement, for trees.....	24 00	
T. J. McDonald, for oats, hay and fertilizer.....	353 75	
W. H. Spalding & Co., for oil, paint, brushes, etc.....	83 40	
G. F. Howard, for brick and labor..	25 00	
James N. Connors, for mason work and material.....	30 00	
E. N. Wood & Co., for seed.....	5 20	
William P. Foye, for hay, oats, corn, straw, etc.....	101 79	
Fred W. Jenness, for sods, loam, gravel, etc.....	185 85	
E. A. & A. T. Smith, for concrete,	1,449 58	
James H. Abbott, for shoeing horse,	9 16	
James Emerson, for horse.	150 00	
Connors Bros., for cement and team- ing	486 15	
Morse & Sparks, for carriage hire...	8 00	
Murphy & Bingham, for carriage hire	5 00	
Avery Marshall, for use of horse...	105 00	
T. Cusack, for labor.....	20 00	
John Brady, for teaming.....	166 75	
C. H. Hanson, for teaming.....	278 50	
	<hr/>	8,244 37
Total expenditure for the year 1891.....		<hr/> <hr/> \$11,785 81

PRINTING AND ADVERTISING.

Appropriation	\$7,000 00	
Transferred from Reserve Fund.....	\$294 73	\$7,000 00
		294 73
		<u>\$7,294 73</u>

EXPENDITURES.

Paid for SUNDRIES :

To Butterfield Printing and Binding Co., for printing.....	\$114 75
Campbell & Hanscom, for printing and advertising.....	499 91
Citizen Newspaper Co., for printing and advertising.....	535 75
S. M. Chase, for printing.....	7 50
Critic Publishing Co., for adver- tising	46 00
Daily News Job Print, for print- ing	1,276 32
Daily News Co., for advertising....	166 08
Evening Star, for advertising.....	1 75
Harrington Bros., for printing.....	1,517 20
A. C. Houston, for advertising	6 25
F. E. Johnson, for printing.....	64 00
Lé National, for advertising.....	24 00
Lepine & Co., for advertising.....	17 75
Lowell Sun, for advertising.....	51 50
Benjamin Lenthier, for adver- tising	2 00
Morning Mail Co., for printing and advertising	1,106 87
Marden & Rowell, for printing and advertising	202 76
<i>Amount carried forward.....</i>	<u>\$5,640 39</u>

Amount brought forward..... \$5,640 39

Paid for SUNDRIES:

To Sunday Arena, for advertising.....	41 66
Vox Populi Press, for printing and advertising	1,294 60
A. Storrs & Bement Co., for paper..	242 19
Lowell Opera House Bill Posting Co., for posting.....	3 00
A. V. Partridge, for posting.....	65 28
C. H. Hanson, for teaming.....	1 50
Thomas Kerwin, for teaming.....	2 50
John Ragen, for teaming.....	1 50
Boston & Maine Railroad, for trans- portation.....	2 11

Total expenditure for the year 1891....

\$7,294 73

L I G H T I N G .

Appropriation.....	\$55,000 00	
	\$55,000 00	

R E C E I P T S .

Received into the Treasury on account
of LIGHTING:

From H. R. Barker Manufacturing Co., for old brass.....	\$5 36	
Lowell Gas Light Co., for lanterns,	3 00	
Town of Dracut, for lamp post and frame.....	5 00	
	13 36	
Transferred from Reserved Fund.....		863 14
		\$55,876 50

E X P E N D I T U R E S .

Paid for LIGHTING PUBLIC
BUILDINGS:

To Lowell Gas Light Co.....	\$1,147 52	
Lowell Electric Light Corp.....	749 46	
	\$1,896 98	

Paid for LIGHTING STREETS:

To Sundry persons, for labor, as per pay rolls	\$7,007 75	
Appropriation for Schools, for coal,	8 91	
Appropriation for Roads and Bridges, for lantern frames.....	7 99	
Appropriation for Paupers, for wood,	10 89	
Appropriation for Water Works, for water.....	14 00	
	\$7,049 54	
<i>Amounts carried forward.....</i>		\$1,896 98

<i>Amounts brought forward.....</i>	\$7,049 54	\$1,896 98
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Paid for LIGHTING STREETS:

To Globe Gas Light Co., for lighting...	8,251 62	
Globe Gas Light Co., for torches....	32 00	
Lowell Gas Light Co., for gas.....	8,322 38	
Lowell Electric Light Corporation, for lighting.....	28,698 60	
Lowell Electric Light Corporation, for changing lights.....	18 00	
Ira W. Dunlap, for lighting band stands.....	8 00	
Amasa Pratt & Co., for lamp posts..	48 00	
Charles E. Adams, for globes and hardware.....	95 50	
Bartlett & Dow, for tools.....	2 35	
H. B. Shattuck, for tools and hard- ware	4 25	
Frederick Taylor Co., for hardware,	4 21	
H. R. Barker Manufacturing Co., for lava tips, fittings, etc.....	243 41	
A. I. Laughton, for lead, solder, cop- per and labor.....	276 86	
A. F. Nichols, for lamp posts.....	56 00	
Pevey Bros., for lamp posts, castings and labor.....	302 87	
Nason B. Parsons, for filing saws, fitting keys, etc.....	49	
O. A. Richardson, for keys	2 10	
J. Merrill & Son, for stationery.....	2 00	
G. M. Foster, for hay.....	61 00	
William E. Livingston, for oats, corn, shorts and straw.....	72 89	
C. B. Coburn & Co., for oil, glass, al- cohol, glycerine, etc.....	316 35	
Simpson & Rowland, for matches...	5 00	
Fay Bros. & Hosford, for repairing carriages	49 12	
C. C. Thompson, for blacksmithing..	50 03	
E. A. & A. T. Smith, for concrete..	6 75	
American Express Co., for transpor- tation.....	20	
	<hr/>	53,979 52
Total expenditures for the year 1891....		<hr/> <hr/> \$55,876 50

PUBLIC BUILDINGS.

Appropriation	\$15,000 00	
	<hr/>	\$15,000 00

RECEIPTS.

Received into the Treasury on account
of PUBLIC BUILDINGS:

From Appropriation for Roads and Bridges, for labor and ma- terial.....	\$3 20	
Appropriation for Reserved Fund, for labor and material.....	1,452 67	
Appropriation for Paupers, for coffins	752 27	
Appropriation for Fire Depart- ment, for cloth.....	3 05	
Appropriation for Sewers and Drains, for labor.....	63	
Appropriation for Commons, for labor and material.....	26 03	
Appropriation for Library, for labor and material....	333 89	
Appropriation for Health, for labor and material.....	22 73	
Appropriation for Water Works, for labor and material.....	411 26	
Appropriation for New Pumping Engine, for labor and material,	166 74	
Richard Bray, for sale of old ma- terial.....	16 95	
John Jessop, for horse.....	60 00	
Thomas Haworth, for rent of land, Race Street.....	5 00	
James Leonard, for rent of land, Race Street.....	1 00	
Lowell Institution for Savings, on loan for erection of New Engine Engine Houses.....	30,000 00	
	<hr/>	33,255 42
		<hr/>
		\$48,255 42
		<hr/>

EXPENDITURES.

Paid SUPERINTENDENT OF
PUBLIC BUILDINGS:

To George T. Woodward, Superintendent, salary.....	\$483 34	
Richard Bray, Superintendent, salary.....	1,016 66	
	<hr/>	\$1,500 00

Paid Sundry persons for labor as per pay rolls.....	\$7,825 36	
	<hr/>	7,825 36

Paid for LUMBER, HARDWARE,
ETC:

To Otis Allen & Son, for lumber.....	\$26 97	
A. P. Bateman, for lumber.....	98 13	
A. L. Brooks & Co., for lumber....	681 86	
Burnham, Forrest & Davis, for lumber.....	233 56	
Burnham & Davis, for lumber.....	166 92	
Howe Bros. & Co., for lumber.....	173 26	
Mark Holmes, Jr., & Son, for lumber and labor.....	7 15	
Amasa Pratt & Co., for lumber....	188 55	
Charles E. Adams, for hardware....	20 71	
Bartlett & Dow, for hardware and tools.....	385 25	
J. C. Bennett, for hardware.....	12 08	
Callahan & Sanborn, for hardware..	17 34	
Boutwell Bros., for iron and steel ..	3 19	
Chelmsford Foundry Co., for tile...	12 50	
A. F. Nichols, for castings.....	5 19	
H. B. Shattuck, for hardware.....	8 93	
Frederick Taylor Co., for hardware,	65 35	
	<hr/>	2,106 94

Paid for SUNDRIES:

To Appropriation for Roads and Bridges, for sidewalk assessment on Grand Street.	\$147 41	
Appropriation for Roads and Bridges, for labor	4 32	
	<hr/>	
<i>Amounts carried forward.</i>	\$151 73	\$11,432 30

<i>Amounts brought forward.....</i>	\$151 73	\$11,432 30
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Paid for SUNDRIES:

To Appropriation for Water Works, for water	7 00
Lowell Gas Light Co., for clay and fire brick.....	19 00
Lowell Electric Light Corporation, for power.....	125 01
New England Telephone and Tele- graph Co., for service.....	59 70
H. R. Barker Manufacturing Co., for boilers, pipe, fittings and labor,	946 31
T. Costello & Co., for pipe, fittings, solder, tin, ventilators, etc.....	199 85
Eastern Electric Light and Storage Battery Co., for repairing appa- ratus, Huntington Hall.....	101 98
Farrell & Conaton, for pipe, fittings, labor, etc.....	515 05
John Gilchrist, for plumbing.....	49 47
William H. Green, for scrapers.....	1 00
Thomas Hall, for repairing anemom- eter	2 00
S. H. Jones, for pipe, fittings, labor. etc.....	72 16
Joel Knapp & Son, for grates and labor	26 23
Lowell Steam Boiler Works, for grates, fire brick, and labor.....	31 76
W. A. Mack & Co., for galvanized iron, tin and solder.....	19 00
Rice & Co., for window guards and wire cloth.....	6 11
James A. Ready, for repairing and inspecting boilers.....	70 29
Scannell & Wholey, for repairing and inspecting boilers.....	60 76
H. H. Wilder & Co., for strainer, solder and labor.....	2 78
C. Zimmer, for repairing lock	2 00
J. W. Bennett & Co., for roofing and capping.....	10 62
James Burns, for labor.....	3 00
S. D. Butterworth, for mason work,	3 94
Coburn & Crosby, for mason work..	2 88

<i>Amounts carried forward.....</i>	<u>\$2,489 63</u>	<u>\$11,432 30</u>
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<i>Amounts brought forward.....</i>	\$2,489 63	\$11,432 30
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Paid for SUNDRIES:

To Connors Bros., for sand, lime, cement and gravel.....	51 65
C. F. Foss & Co., for mason work..	9 64
Lewis D. Gumb, for stone.....	7 00
Robert Goulding, for slate, zinc and labor.....	23 89
Howard & Wilson, for sand, lime, brick and cement.....	29 35
William E. Livingston, for coal, lime, cement, etc.....	111 16
D. M. Prescott, for mason work and material.....	50 90
E. A. & A. T. Smith, for concrete..	27 50
Samuel E. Snow, for mason work and material.....	64 41
Staples Bros., for pipe and brick....	24 63
R. Taff & Co., for mason work.....	16 00
S. H. Weaver, for roofing.....	46 50
G. A. Andrews, Agent, for vaporizer,	8 00
C. B. Coburn & Co., for oil, ammo- nia, potash, putty, glass, etc....	142 84
John Ryan & Co., for rags.....	1 00
W. H. Spalding & Co., for paint, brushes, bronze, etc.....	421 63
John Cross, for awnings and repair- ing.....	11 50
J. B. Currier, for coffin.....	3 00
Harwood Manufacturing Co., for fibre seats.....	7 20
J. V. Keyes & Co., for cloth.....	26 05
William L. Lockhart, for studs, han- dles and trimmings.....	91 88
Alvin Lawrence, for clock.....	8 00
Alphonse Monier, for cotton cloth..	38 20
J. F. Puffer & Son, for lantern.....	1 67
Richard Bray, for postage.....	2 00
H. C. Church & Son, for stationery,	5 80
Thomas H. Lawler, for blank books, pens, rubber bands, etc.....	7 62
J. Merrill & Son, for blank books, stamps and ink.....	3 40
C. W. Cheney, for refreshments....	6 95
Richardson's Hotel, for refreshments,	7 45

<i>Amounts carried forward.....</i>	\$3,746 45	\$11,432 30
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Amounts brought forward..... \$3,746 45 \$11,432 30

Paid for SUNDRIES :

To Fred C. Miller, for plans and specifications for Police Stable (balance),	50 00	
O. E. Averill, for blacksmithing....	22 59	
Abbott Downing Co., for wagon....	145 00	
T. M. Bolton & Co., for harness and repairing	67 60	
E. P. Bryant, for wagon.....	142 00	
Cahill Bros., for shoeing.....	22 35	
Thomas Clark, for repairing carriages,	14 70	
H. F. Ebert, for whip, enameled cloth, etc.....	15 30	
Fay Bros. & Hosford, for canopy top,	16 50	
P. H. Heelon, for keeping horse....	200 66	
John Jessop, for horse.....	250 00	
M. V. B. Libbey, for shoeing horses,	20 45	
Murphy & Bingham, for keeping horse	42 35	
H. J. O'Dowd & Co., for blanket, duster, robe, etc	57 00	
T. J. Reynolds, for shoeing.....	27 80	
Shufelt & McCoy, for repairing carriages	24 36	
Sawyer Carriage Co., for repairing carriages	13 46	
J. B. Varnum, for rent of stall.....	32 00	
O. D. Wilder, for grain.....	66 31	
J. H. Sparks, for professional services,	5 00	
D. J. Kelly, for teaming.....	50	
Daniel McCarthy, for teaming.....	16 00	
Alphonso Merrill, for teaming.....	50	
Frank Richards, for teaming.... ..	1 00	
Leonard Reed, for teaming.....	1 00	
Redmond Welch, for teaming.....	3 00	
J. A. Chase, for carriage hire.....	1 00	
Morse & Sparks, for carriage hire...	53 00	
George Richardson, for carriage hire,	1 50	
George H. Taylor, for use of pung,	18 25	
American Express Co., for transportation	1 55	
New England Despatch Express Co., for transportation.....	1 00	
Boston & Maine Railroad, for mileage tickets.....	60 00	
		5,139 88
<i>Amount carried forward</i>		\$16,572 18

Amount brought forward..... \$16,572 18

Paid for CARRIAGE SHED AT
POLICE STATION:

To Sundry persons for labor, as per pay rolls	\$167 22	
Amasa Pratt & Co., for lumber.....	118 20	
American Bolt Co, for beams, bolts and washers.....	25 24	
O. E. Averill, for blacksmithing....	2 65	
Bartlett & Dow, for hardware.....	5 64	
J. W. Bennett & Co., for roofing..	72 42	
Connors Bros., for stone, brick, sand, cement. etc.....	274 00	
Frederick Frye, for mason work....	253 25	
Farrell & Conaton, for pipe and fittings.....	2 70	
W. A. Mack & Co., for cornice.....	45 00	
		966 32

Paid on account of ENGINE HOUSE,
PAWTUCKETVILLE:

To Sundry persons, for labor as per pay rolls.....	\$156 87	
Appropriation for Reserved Fund, for engineering.....	20 51	
Appropriation for Water Works, for service pipe and labor.....	20 45	
Ford & Phillips, on account of plans and specifications.....	300 00	
American Bolt Co., for steel beams and iron plates.....	167 94	
B. G. Brown, for foundation, per contract.....	1,450 00	
George E. Barclay, for carpenter work, per contract.....	2,000 00	
Dennis H. Kelly, for brick work, per contract.....	2,700 00	
Burnham & Davis, for lumber.....	2 74	
Amasa Pratt & Co., for lumber.....	22 50	
Farrell & Conaton, for fittings and labor.	2 38	
		* 6,843 39
<i>Amount carried forward</i>		\$24,381 89

* To this amount add the sum of \$854.56 expended in 1889, making total cost of land and building to Jan. 1, 1892, \$7,697.95.

Amount brought forward..... \$24,381 89

Paid on account of ENGINE HOUSE,
LAWRENCE STREET:

To Appropriation for Roads and Bridges, for engineering.....	\$36 70	
Sundry persons for labor, per pay rolls	2 50	
Fred W. Stickney, on account of plans and specifications.....	300 00	
Cyrus Barton, for foundation, per contract.....	2,684 00	
Burnham & Davis, for lumber.....	2 74	
	<hr/>	* 3,025 94
Total expenditure for the year 1891.....		\$27,407 83
Balance undrawn, Dec. 31, 1891, (ordinary)		716 92
Balance undrawn, Dec. 31, 1891, (New Buildings)		20,130 67
		<hr/>
		<u>\$48,255 42</u>

* To this amount add the sum of \$2,809.87 expended in 1889, making total cost of land and building to Jan. 1, 1892, \$5,835.81.

HIGH SCHOOL BUILDING.

RECEIPTS.

Received into the Treasury on account
of HIGH SCHOOL BUILDING:

From City Institution for Savings, for fifty-five \$1,000 High School Bonds, dated April 1, 1891...	\$55,000 00	
National Hide and Leather Bank, for ninety-five \$1,000 High School Bonds, dated April 1, 1891	95,000 00	
	<hr/>	\$150,000 00

EXPENDITURES.

Paid for SUNDRIES:

To Sundry persons, for labor, as per pay rolls	\$571 50	
Appropriation for School-houses, for labor	1,106 51	
Appropriation for Roads and Bridges, for engineering	27 17	
Louis T. Montferrand, for land on Anne Street	13,500 00	
George H. Pillsbury, for land on Kirk Street	18,000 00	
William H. Anderson, for services as arbitrator	50 00	
William J. Coughlin, for services as arbitrator	100 00	
E. T. Rowell, for services as arbi- trator	50 00	
<i>Amount carried forward</i>	<hr/>	\$33,405 18

Amount brought forward..... \$33,405 18

Paid for SUNDRIES:

To Fred W. Stickney, for plans and specifications.....	100 00	
William H. Wiggin, for services as arbitrator.....	100 00	
American Bank Note and Lithographing Co., for printing bonds.....	225 00	
Patrick F. Brady, for excavation and foundation per contract.....	2,500 00	
Patrick F. Brady, for labor and material.....	1,601 36	
Burnham & Davis, for lumber.....	73 86	
Farrell & Conaton, for labor.....	117 00	
Frederick Frye, for labor.....	734 25	
Daniel McCarthy, for teaming.....	11 00	
		<hr/>
Total expenditure for the year 1891.....		\$38,867 65
Balance undrawn, Dec. 31, 1891		111,132 35
		<hr/>
		\$150,000 00
		<hr/>

CITY HALL AND MEMORIAL BUILDING.

Balance undrawn, Jan. 1, 1891.....	\$63,964 24	
	<hr/>	\$63,964 24

RECEIPTS.

Received into the Treasury on account
of CITY HALL AND ME-
MORIAL BUILDING:

From Barnard & Stanwood, for bonds dated Oct. 1, 1890.....	\$5,000 00	
Blake Bros. & Co., for bonds dated Oct. 1, 1890.....	100,000 00	
Kidder, Peabody & Co., for bonds dated Oct. 1, 1890.....	100,000 00	
Hide and Leather National Bank, for bonds dated Oct. 1, 1890,	50,000 00	
	<hr/>	255,000 00
		<hr/> <hr/>
		\$318,964 24

EXPENDITURES.

Paid on account of CITY HALL:

To Appropriation for Roads and Bridges, for engineering.....	\$28 54	
Merrill & Cutler, for plans, specifica- tions and services in superintend- ing construction of building....	2,255 31	
Builders' Iron Foundry, for iron work, per contract.....	9,990 00	
Cape Ann Granite Co., for stone work, per contract.....	41,610 00	
C. F. Foss & Co., for brick work, per contract.....	40,175 00	
	<hr/>	
<i>Amount carried forward</i>	\$94,058 85	

Amount brought forward.... \$94,058 85

Paid on account of CITY HALL:

To Maine & New Hampshire Granite Co., for stone, per contract.....	3,900 00	
P. O'Hearn, for foundation, per contract.....	90 00	
William H. Wiggin, for carpenter work, per contract.....	11,425 00	
William H. Wiggin, for labor and material	134 52	
H. R. Barker Manufacturing Co., for heating, per contract.....	1,890 00	
Emma F. Estes, for typewriting....	2 35	
Campbell & Hanscom, for advertising	7 50	
Morning Mail Corp., for advertising,	10 00	
Western Union Telegraph Co., for telegrams	53	
Murphy & Bingham, for carriage hire	8 00	
	<hr/>	* 111,526 75

Paid on account of MEMORIAL BUILDING:

To Appropriation for Roads and Bridges, for engineering.....	\$5 63	
Frederick W. Stickney, for plans, specifications and services in superintending construction of building.....	1,780 25	
Boston Terra Cotta Co., for Terra Cotta panels.....	1,500 00	
Chelmsford Foundry Co., for iron work, per contract.....	5,600 00	
Chelmsford Foundry Co., for rods, brackets, etc.....	151 07	
C. F. Foss & Co., for brick work, per contract.....	15,600 00	
C. F. Foss & Co., for labor and material.....	367 84	
<i>Amounts carried forward</i>	<hr/> \$25,004 79	<hr/> \$111,526 75

* To this amount add \$43,818.45 expended previous to Jan. 1, 1891, making cost of City Hall to Jan. 1, 1892, \$155,345.20.

Amounts brought forward..... \$25,004 79 \$111,526 75

Paid on account of MEMORIAL
BUILDING:

To Farrell & Conaton, for plumbing, per contract.....	500 00	
Fred H. Holton & Co., for slate, per contract.....	5,077 80	
Fred H. Holton & Co., for copper balls.....	7 50	
Maine and New Hampshire Granite Co., for stone, per contract....	28,358 00	
Maine and New Hampshire Granite Co., for polishing pillars.....	627 00	
J. B. Varnum, for carpenter work, per contract.....	12,200 00	
Benjamin G. Brown, for teaming...	150 00	
Emma F. Estes, for typewriting....	2 35	
C. H. Hanson, for teaming	22 50	
Chas. Runels, for labor, material, etc.,	151 43	
Vox Populi Press, for advertising...	2 00	
William H. Wiggin, for hay, straw and labor.....	41 22	
	<hr/>	* 72,144 59
Total expenditure for the year 1891		\$183,671 34
Balance undrawn Dec. 31, 1891		135,292 90
		<hr/>
		\$318,964 24
		<hr/>

* To this amount add \$32,301.80 expended previous to Jan. 1, 1891, making cost of Memorial Building to Jan. 1, 1892, \$104,446.39.

LIBRARY.

Appropriation.....	\$12,000 00	
	<hr/>	\$12,000 00

RECEIPTS.

Received into the Treasury on account
of LIBRARY:

From Charles H. Burbank, for fines, fees, etc.....	\$43 96	
F. A. Chase, for fines, fees, etc....	80 35	
Harriet F. Hill, for fines, fees, etc	66 50	
County of Middlesex, for dog li- censes of 1890.....	3,254 69	
Abington Mutual Fire Insurance Co.....	1,350 00	
Dedham Mutual Fire Insurance Co.....	675 00	
Essex Mutual Fire Insurance Co.,	1,350 00	
Fitchburg Fire Insurance Co.....	2,025 00	
Holyoke Mutual Fire Insurance Co.....	1,350 00	
Hampshire Fire Insurance Co....	675 00	
Merrimack Mutual Fire Insurance Co.....	1,350 00	
Merchants' & Farmers' Fire Insur- ance Co., Worcester.....	1,350 00	
Mutual Fire Insurance Co., of Salem	1,350 00	
Quincy Fire Insurance Co.....	675 00	
Traders & Mechanics Fire Insur- ance Co.....	1,350 00	
	<hr/>	16,945 50
		<hr/>
		\$28,945 50
		<hr/> <hr/>

EXPENDITURES.**Paid for LIBRARIAN AND ASSISTANTS:**

To Charles H. Burbank, Librarian, salary	\$125 00	
Fred A. Chase, Librarian, salary.....	729 84	
Sundry persons, for labor, as per pay rolls	4,989 40	
Clara Beard, for compensation for extra services	50 00	
Harriet F. Hill, for compensation for extra services.....	100 00	
	<hr/>	\$5,994 24

Paid for BOOKS AND PERIODICALS:

To D. Appleton & Co.....	\$12 00	
Jennie M. Ball.....	13 50	
Boston Book Co.....	88 85	
Balch Bros.. ..	25 00	
Blackie & Son.....	19 50	
N. J. Bartlett & Co.....	123 81	
Fred A. Chase.....	169 48	
W. B. Clarke & Co.....	2,440 22	
DeWolfe, Fiske & Co.....	2 20	
Oliver Ditson Co.....	16 20	
F. A. Davis	4 00	
Estes & Lauriat.....	41 00	
S. B. Fisher.....	25 60	
J. H. Hickcox	5 00	
Harriet F. Hill.....	152 29	
Houghton, Mifflin & Co.	149 75	
J. W. Lewis & Co.....	25 00	
A. Lovell & Co.....	1 60	
La Societe de Publications Fran- caises des Etats Unis	2 00	
George E. Littlefield.....	6 75	
Chas. F. Libbie & Co.....	344 78	
Little, Brown & Co.....	82 51	
Leonard A. Morrison	1 50	
Middlesex Mechanics Association...	40 25	
L. C. Manchester.....	10 00	
New England Historic Genealogical Society	3 00	
<i>Amounts carried forward.....</i>	<hr/>	<hr/>
	\$3,805 79	\$5,994 24

<i>Amounts brought forward.....</i>	\$3,805 79	\$5,994 24
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Paid for BOOKS AND PERIODICALS:

To Office of Publishers' Weekly	10 00	
George H. Polley & Co.....	57 98	
G. C. Prince & Son.....	706 57	
S. Raymond Roberts.....	60 00	
Sidney S. Ryder, Agent.....	50	
Soldiers' and Sailors' Historical Society of Rhode Island.....	2 00	
John G. Shea.....	5 00	
Sampson, Murdock & Co.....	13 00	
Gustav E. Steckert.....	25 00	
Carl Schoenhof	411 50	
B. F. Stevens.....	453 63	
Studies in Historical and Political Science.....	3 00	
Frederick I. Winslow.....	5 00	
George H. Walker & Co.....	15 00	
Arena Newspaper Co.....	2 00	
American Journal of Psychology...	5 00	
Boston Public Library.....	1 00	
Citizen Newspaper Co.....	5 00	
Campbell & Hanscom.....	9 00	
Educational Review.....	2 50	
Egypt Exploration Fund.....	5 00	
Lowell Daily Courier	6 00	
Lowell Sun.....	1 00	
Lepine & Co.....	50	
Library Bureau	31 13	
Morning Mail Corp.....	9 00	
Proprietors of Lewiston Journal....	1 00	
Vox Populi Press.....	2 00	
	<hr/>	5,654 10

Paid for SUNDRIES:

To Appropriation for Public Buildings, for labor and material.....	\$333 89	
Lowell Gas Light Co., for gas.....	232 88	
Lowell Electric Light Corp., for lighting.....	651 45	
New England Telephone and Telegraph Co., for service.....	32 30	
Fred A. Chase, for rubber stamps, postage etc.....	135 11	
	<hr/>	
<i>Amounts carried forward</i>	\$1,385 63	\$11,648.34

<i>Amounts brought forward</i>	\$1,385 63	\$11,648 34
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Paid for SUNDRIES :

To Harriet F. Hill, for rubber bands, postage, etc.....	49 32
Charles F. Libbie, for services ad- justing insurance.....	100 00
Otis Allen & Son, for book racks...	120 00
Milton Aldrich, for clamps.....	7 00
Burnham, Forrest & Davis, for lum- ber	7 00
Mark Holmes, Jr. & Son, for case, mouldings and labor.....	31 90
Howe Bros. & Co., for lumber.....	6 48
H. R. Barker Manufacturing Co., for pipe, fittings, etc.....	18 95
G. W. Bagley, for wire, cord and labor	1 85
Frank H. Derby, for wire, bells and salamoniac	1 91
Farrell & Conaton, for labor and material.....	36 77
S. H. Jones, for trap, strainer, solder, etc	6 90
H. B. Shattuck, for hardware and tools.....	15 95
Frederick Taylor Co., for hardware, and repairing door check.....	8 85
H. H. Wilder & Co., for repairing glue pot, etc.....	1 25
Charles Littlefield & Co., for press boards	17 05
Bachelor, Dumas & Co., for repair- ing books	1,544 25
James R. Bailey, for paper.....	75 04
James M. Fellows, for stamps and pads.....	4 48
Hammond Typewriter Co., for rib- bon, shield, etc.....	1 56
Thomas H. Lawler, for blank books, cards, etc.....	12 80
Campbell & Hanscom, for postal cards.....	10 00
H. C. Church & Son, for pencils, ink, paper, etc.....	8 43
Taylor Bros., for mucilage.....	2 00
Ticknor & Co., for binding.....	4 00

<i>Amounts carried forward</i>	\$3,479 37	\$11,648 34
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Amounts brought forward..... \$3,479 37 \$11,648 34

Paid for SUNDRIES :

To W. W. White, for mounting and finishing map.....	2 50	
Adams & Co., for chairs and repairing.....	12 50	
Warren Clifford, for cleaning carpet,	12 60	
A. Eaton & Son, for enamel cloth...	1 50	
M. F. Gookin, for carpet, lining and labor	8 15	
Offutt & Whittaker, for rugs, seats and labor.....	6 10	
A. G. Pollard & Co., for cotton cloth,	6 13	
Clinton L. Bruce, for plaster cloth..	24 00	
C. B. Coburn & Co., for glue, brooms, tapers, brushes. etc.....	17 20	
Daniel Gage, for ice.....	63 07	
A. L. Kittredge & Co., for paper and hanging.....	39 81	
J. F. Puffer & Son, for cooler, cup and pail.....	8 50	
W. H. Spalding & Co., for brush, paste, shellac, etc.....	4 31	
Alvin Lawrence, for repairing clock,	2 00	
Conners Bros., for coal.....	6 75	
William Kittredge Co., for coal....	3 38	
Thomas C. Lee, Agent, for insurance,	1 50	
F. W. Sherman, for insurance.....	3 00	
N. W. Norcross & Co., Agents, for insurance.....	150 00	
Edson Block, for rent.....	250 67	
Fred H. Ela, Agent, for rent.....	240 00	
Irvine Block, for rent.....	170 00	
Trustees, A. H. Hosford, for rent and heating.....	1,135 60	
Stanton & Thurston, for watering street	6 75	
George E. Stanley, for transportation	4 13	
		5,659 52
Total expenditure for the year 1891.....		\$17,307 86
Balance undrawn Dec. 31, 1891.....		11,637 64
		<u>\$28,945 50</u>

H E A L T H .

Appropriation	\$25,000 00	
	<hr/>	\$25,000 00

R E C E I P T S .

Received into the Treasury on account
of HEALTH :

From F. A. Bates, for sale of offal, manure, etc.....	\$3,695 57	
H. H. Knapp, for sale of horse and wagon	250 00	
	<hr/>	3,945 57
Transferred from Reserved Fund.....		1,881 71
		<hr/>
		\$30,827 28
		<hr/>

E X P E N D I T U R E S .

Paid BOARD OF HEALTH:

To James B. Field, salary.....	\$600 00	
Charles R. Costello, salary.....	600 00	
	<hr/>	1,200 00
Paid Sundry persons. for labor, as per pay rolls	\$22,755 19	
	<hr/>	\$22,755 19

Paid for HAY, GRAIN, ETC:

To W. W. Butler, for hay.....	\$153 71	
Thomas H. Connell, for hay.....	64 35	
G. M. Foster. for straw.....	23 50	
C. H. Hanson, for oats and straw....	137 95	
G. G. Kelly, for hay.....	96 75	
William E. Livingston, for oats, salt, etc.....	386 04	
	<hr/>	
<i>Amounts carried forward.. . . .</i>	\$862 30	\$23,955 19

<i>Amounts brought forward.....</i>	\$862 30	\$23,955 19
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Paid for HAY, GRAIN, ETC:

To T. J. McDonald, for corn, shorts, meal, oats, etc.....	357 75	
A. G. Stiles & Co., for corn, shorts, etc.....	358 74	
E. S. Sherman & Co., for corn, shorts, salt, etc.....	7 85	
C. C. Thompson, for hay.....	105 30	
John C. Woodward, for hay.....	37 80	
E. N. Wood & Co., for corn, salt, and shorts.....	271 35	
William H. Wiggin, for hay.....	119 95	
	<hr/>	2,121 04

Paid for HORSES, CARRIAGES,
HARNESSES, ETC.:

To Appropriation for Roads and Bridges, for repairing carriages, harnesses, etc.....	\$475 50	
T. M. Bolton, for blanket, harness and repairing.....	237 30	
H. F. Ebert, for bells and repair- ing harness.....	31 60	
Fay Bros., for repairing carriages...	39 60	
J. H. Swett, for wagon and repair- ing.....	192 79	
C. C. Thompson, for shoeing horses,	9 00	
C. H. Hanson. for bay horse.....	200 00	
	<hr/>	1,235 79

Paid for SUNDRIES:

To Appropriation for Schools, for coal,	\$9 18	
Appropriation for Paupers, for wood,	5 50	
Appropriation for Police, for services of officers.....	38 50	
Appropriation for Public Buildings. for lumber and labor.....	24 73	
Appropriation for Water Works, for water.....	68 50	
Lowell Gas Light Co., for gas.....	90 20	
New England Telephone and Tele- graph Co.. for service.....	139 56	
	<hr/>	
<i>Amounts carried forward.....</i>	\$376 17	\$27,312 02

<i>Amounts brought forward</i>	\$376 17	\$27,312 02
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Paid for SUNDRIES :

To Burnham, Forrest & Davis, for lum- ber	67 85
Burnham & Davis, for lumber.....	28 37
Mark Holmes, Jr., & Son, for labor and lumber.....	3 00
William Kelley & Son, for lumber and windows.....	5 10
Charles E. Adams, for hardware and tools.....	35 71
Boutwell Bros., for iron, steel, wheels, etc	132 17
Bartlett & Dow, for safe, hardware and tools.....	82 53
Rice & Co., for wire cloth.....	2 48
Frederick Taylor Co., for hardware, H. R. Barker Manufacturing Co., for milk stand.....	1 25
T. Costello & Co., for pipe, fittings, labor, etc	3 50
A. Nourborn, for repairing carriages, James Stanley, for repairing clock..	105 17
N. J. Weir & Co., for grate and sifters.....	1 50
C. Zimmer, for keys.....	1 00
C. Clough, for repairing chest.....	1 40
H. M. Alexander, for vaccine points, C. F. Blanchard, for medicine.....	3 05
F. H. Butler & Co., for porcelain dishes and sal-soda.....	50
F. E. Bailey & Co., for vaccine points, etc	25 00
Carleton & Hovey, for brush, medi- cine, lactroscope, etc	8 35
Charles E. Carter, for bottles and corks.....	4 50
Ellingwood & Co., for vaccine points, etc	5 03
John I. Gibson & Co., for splints and bandages....	20 45
E. Brown, for broom material.....	14 10
Edward Cawley, for coal.....	13 89
C. B. Coburn & Co., for oil, alco- hol, wax, etc	5 50
	1 44
	17 13
	87 35

<i>Amounts carried forward</i>	<hr/> \$1,053 49	<hr/> \$27,312 02
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<i>Amounts brought forward</i>	\$1,053 49	\$27,312 02
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Paid for SUNDRIES:

To Educational Supply Co., for chemicals	5 92
Daniel Gage, for ice.....	19 20
E. F. Hathaway, for lettering tablet,	50
O. B. Randlett, for ginger, matches and soap.....	5 25
W. H. Spalding & Co., for glass and labor.....	75
Talbot Dyewood & Chemical Co., for nitre, ammonia, sulphuric acid, etc.....	4 99
Adams & Co., for mattress and pillows	8 00
John H. Cleary, for mattress.....	3 00
L. W. Hawkes & Co., for chairs....	3 00
J. F. Puffer & Son, for tub, pitcher and chimneys.....	6 77
A. G. Pollard & Co., for cloth.	3 25
Spencer & Co., for ash barrel.....	2 00
C. H. Hanson, for medicine for horses,	14 75
Sutherland Liniment Co., for liniment	6 00
Charles S. Binner & Co., for letter books.....	9 50
Citizen Newspaper Co., for advertising	2 25
H. C. Church & Son, for paper and diaries	11 65
F. P. Coggeshall, for blank books and stationery	20 45
Campbell & Hanscom, for postals, envelopes and subscription.....	11 50
Engineering Record, for subscription,	4 00
F. Blanche Hard, for typewriting...	40 96
Harrington Bros., for blank books..	28 50
Thomas H. Lawler, for ink, paper, tablets, etc.....	11 00
Lowell Daily Courier, for subscription	6 00
J. Merrill & Son, for blank books, directory, envelopes, etc.	13 25
J. L. Severance, for stamp and pad,	2 50
The Sanitary Era, for subscription..	2 00
<i>Amounts carried forward</i>	\$1,300 43

\$27,312 02

<i>Amounts brought forward</i>	\$1,300 43	\$27,312 02
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Paid for SUNDRIES :

To Vox Populi Press, for blank books, subscription, etc.....	46 00
Goodyear Gossamer Co., for rubber boots.....	9 00
Quinlan and Washburn, for rubber bands.....	1 00
Massachusetts Association Boards of Health, for assessment.....	12 00
Thomas O. Allen, for alcohol, post- tage, samples of milk, etc... ..	40 50
F. A. Bates, for postage, cards, keys, etc.....	7 30
Mary Smith, for labor.....	50 00
Horace H. Knapp, for postals, ink, expressing, etc.....	74 39
F. E. Saunders, for barometer and temperature readings.....	122 80
William F. Courtney, for professional services.....	100 00
F. W. Chadbourne, for professional services.....	2 00
B. F. Davenport, for professional ser- vices.....	50 00
Charles M. Frye, for professional ser- vices.....	34 00
A. E. Gillard, for professional ser- vices.....	3 00
Cyrus W. Irish, for expert testimony and analyses of milk.....	25 00
William A. Johnson, for professional services.....	226 00
W. A. Sherman, for professional ser- vices.....	62 00
J. F. Sullivan, for professional ser- vices.....	55 00
A. W. Baker, for veterinary dentis- try.....	14 00
J. H. Sparks, for professional ser- vices.....	4 00
Robert Wood, for professional ser- vices.....	2 00
J. B. Field, for travelling expenses..	2 00
David E. Ready, for butter tubs....	3 00

<i>Amounts carried forward</i>	\$2,245 42	\$27,312 02
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Amounts brought forward..... \$2,245 42 \$27,312 02

Paid for SUNDRIES:

To Durant & Rogers, for badge.....	1 50	
William E. Livingston, for lime and cement.....	2 25	
George L. Fowler, for labor and ma- terial, removing bath house...	352 80	
Irvine Block, for rent.....	549 99	
Proprietors of Locks and Canals, for rent of land.....	40 00	
Thomas H. Connell, for appraising property, etc.	26 65	
Mary A. Logue, for clothing de- stroyed	15 00	
Joshua Atwood, for keeping horse..	20 00	
Charles Clapp, for use of horse....	44 00	
C. H. Hanson, for use of horse and shoeing.....	205 75	
Morse & Sparks, for carriage hire...	11 90	
		<hr/>
		3,515 26
Total expenditure for the year 1891		<hr/> <u>\$30,827 28</u> <hr/>

WATER WORKS.

Balance undrawn, Jan. 1, 1891.....	\$811 89	
		\$811 89

RECEIPTS.

Received into the Treasury on account
of WATER WORKS:

From Sundry person, for water, etc., in 1888.....	\$9 55	
Sundry persons, for water, etc., in 1889.....	63 05	
Sundry persons, for water, etc., in 1890	21,258 71	
Sundry persons, for water, etc., in 1891.....	182,127 49	
Appropriation for New Pumping Engine, for sundry bills.....	2,538 40	
		205,997 20
		\$206,809 09

EXPENDITURES.

Paid PRESIDENT AND SUPER-
INTENDENT:

To John Stott, President, salary.....	\$75 27	
Miles F. Brennen, President, salary,	324 73	
Millard F. Wright, Superintendent, salary.....	400 00	
Samuel P. Griffin, Superintendent, salary.....	1,200 00	
		2,000 00
Paid Sundry persons, for labor, as per pay rolls.....	\$38,181 39	
		38,181 39
<i>Amount carried forward</i>		\$40,181 39

Amount brought forward..... \$40,181 39

Paid for INTEREST:

To Sundry persons on City of Lowell, Water Board, dated Nov. 1, 1870.....	\$780 00	
Sundry persons, on City of Lowell, Water Bonds, dated Nov. 1, 1890.....	26,940 00	
City Institution for Savings, on notes, Lowell Institution for Savings, on notes.....	3,250 00	
Blake Bros. & Co., on note.....	20,300 00	
	3,000 00	
	<hr/>	54,270 00

Paid REFUNDS:

To Sundry persons, on Water Rates...	\$1,796 10	
	<hr/>	1,796 10

Paid for FUEL:

To B. G. Brown, for wood.....	\$51 19	
Buxton & Chapman, for wood.....	4 00	
Edward Cawley, for coal.....	7 00	
Howard & Wilson, for coal.....	20 25	
D. W. Horne & Son, for coal.....	4,880 53	
Willam E. Livingston, for coal.....	9,855 25	
	<hr/>	14,818 22

Paid for PIPE, METERS, HY-
DRANTS, ETC.:

To American Frost Meter Co., for meter cylinder	\$8 00	
Builders' Iron Foundry, for fittings, etc.....	817 81	
H. R. Barker Manufacturing Co., for pipe, fittings, labor, etc.....	1,559 26	
T. Costello & Co., for lead, solder, pipe, etc.....	4,695 66	
Chapman Valve Manufacturing Co., for pipe, valves, etc.....	683 96	
Charles Carr, for hydrant, packing, etc.....	85 00	
Eddie Valve Co., for hub.....	20 25	
	<hr/>	
<i>Amounts carried forward</i>	\$7,869 94	\$111,065 71

Amounts brought forward..... \$7,869 94 \$111,065 71

Paid for PIPE, METERS, HY-
DRANTS, ETC.:

To Erie City Iron Works, for elevator engine	147 00	
Farrell & Conaton, for fittings.....	5 00	
Hersey Manufacturing Co., for meters,	176 25	
S. H. Jones, for pipe, fittings, and labor	30 08	
Locke Bros., for damper regulator..	150 00	
Ludlow Valve Manufacturing Co., for hydrant, barrel and rings.....	18 90	
National Meter Co., for meters and covers	5,653 35	
S. C. Nightingale & Childs, for valves, fittings, etc.....	70 76	
Page Belting Co., for valves	50 40	
Pancoast & Rogers, for pipe.....	2,176 92	
Staples Bros., for pipe, boxes, etc...	1,048 18	
Siebert Cylinder Oil Cup Co., for oil cup.....	7 60	
Thomson Meter Co., for meters.....	21 78	
Frederick Taylor Co., for lead pipe, etc	964 02	
Henry R. Worthington, for plunger, repairing meters, etc.....	53 90	
R. D. Wood & Co., for pipe.....	16,532 45	
Whittier Machine Co., for water gates, gaskets, etc.....	835 80	
H. H. Wilder & Co., for pipe, zinc, solder, copper, etc	184 18	
	<hr/>	35,996 51

Paid for SUNDRIES:

To Appropriation for Roads and Bridges, for engineering, labor, etc.....	\$484 16	
Appropriation for Reserved Fund, for engineering.....	33 12	
Appropriation for Fire Department, for labor.....	49 75	
Lowell Gas Light Co., for gas and derrick	122 49	
Lowell Electric Light Corporation, for lighting.....	404 83	
	<hr/>	
<i>Amounts carried forward</i>	\$1,094 35	\$147,062 22

Amounts brought forward..... \$1,094 35 \$147,062 22

Paid for SUNDRIES:

To New England Telephone and Telegraph Co., for service.....	271 09
Western Union Telegraph Co., for service	20 83
Commercial Union Telegraph Co., for service.....	1 73
Lowell Horse Railroad Co., for tickets	20 00
New England Gamewell Co., for gong.	125 00
Burnham & Davis, for lumber.....	300 12
Burnham, Forrest & Davis, for lumber	275 19
Howe Bros. & Co., for lumber.....	240 66
Merrimack Croquet Co., for mauls and stopples	13 50
Amasa Pratt & Co., for lumber.....	76 76
Charles E. Adams, for shovels.....	4 00
American Bolt Co., for bolts, washers, taps, etc.	42 43
O. E. Averill, for blacksmithing....	130 79
J. J. Adams, for filing saws.....	34
Bradlee, Hastings & Co., for files....	8 40
Bartlett & Dow, for hardware and tools.....	111 08
Boutwell Bros., for iron, steel, etc....	77 40
Dodge, Haley & Co., for tools.	43 79
Eastern Electric Light and Storage Battery Co., for battery, bells, wire and labor.....	25 60
L. W. Ferdinand & Co., for chain...	15 36
W. B. Glover, for filing saws.....	7 00
• Hill, Clark & Co., for Hendey shaper,	290 00
A. R. Kingsbury, for blacksmithing,	3 25
Lowell Machine Shop, for castings,	2 45
Alvin Lawrence, for repairing clock,	1 00
W. A. Mack & Co., for skimmers, tin, labor, etc.....	335 95
McBarron & Co., for steel.....	8 45
Merrimack Iron Foundry, for castings	15 75
Nashua Iron and Steel Co., repairing link, shaft, etc.....	39 50

Amounts carried forward..... \$3,601 77 \$147,062 22

<i>Amounts brought forward</i>	\$3,601 77	\$147,062 22
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Paid for SUNDRIES:

To A. F. Nichols, for castings.....	223 74
Pevey Bros., for castings.....	41 61
Priest, Page & Co., for wheelbarrow scales	63 00
Perrin, Seamans & Co., for emery wheel, pump, ladle, etc.....	198 35
H. B. Shattuck, for hardware.....	52 05
Frederick Taylor Co., for hardware, etc	48 34
The Fairbanks Co., for repairing and adjusting scales.....	59 87
Union Iron Foundry Co., for castings,	32 66
Whittet & McDonald, for lumber, hardware and labor.....	23 46
H. H. Wilder & Co., for ash pans, solder, etc.....	30 33
Sylvester Bean, for oil, lead, paint and labor.....	19 01
Charles E. Carter, for medicine.....	65
Carleton & Hovey, for water jugs, etc	8 65
C. B. Coburn & Co., for oil, naptha, soap, rope, brooms, waste, etc..	476 32
Donovan & Co., for forcite and ex- ploders	18 75
Josiah Gates & Sons, for hose, coup- lings, labor, etc.....	144 52
John I. Gibson & Co., for bottles....	2 60
C. M. Erskine, for salt, matches, etc.,	8 86
Daniel Gage, for ice.....	37 62
E. F. Hathaway, for painting signs..	3 85
T. H. Jones & Co., for glass and labor	1 40
A. L. Kittredge & Co., for oil, lead, paint and labor.....	193 69
Miller Bros., for soap, matches, etc..	9 79
William Nichols, for soap, matches, candles, etc.....	15 02
W. H. Spalding & Co., for paper, shellac, etc.....	21 65
George S. Saunders, for tripoli.....	6 00
W. F. Stevens, for repairing and painting boat.....	5 00

<i>Amounts carried forward</i>	<u>\$5,348 56</u>	<u>\$147,062 22</u>
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Amounts brought forward..... \$5,348 56 \$147,062 22

Paid for SUNDRIES:

To Talbot Dyewood and Chemical Co., for sal-soda.....	7 04	
Adams & Co, for desk.....	20 00	
W. T. Bradley, for oil cloth.....	1 00	
Goodyear Gossamer Co., for rubber boots, diaphragm, etc.....	23 16	
Lowell Felting Mills, for felt.....	7 11	
Manning & Leighton, for furniture..	9 50	
J. F. Puffer & Son, for spittoons and repairing chairs.....	4 12	
Quinlan & Washburn, for repairing horse cover	35	
Bennett & Conlon, for mason work and material.....	135 27	
Edward Cawley, for cement, sand and pipe	132 25	
John J. Donovan, for labor and material.....	35 75	
Frederick Frye, for brick, cement, sand and labor.....	85 45	
Robert Goulding, for snow guards..	8 55	
L. F. Kittredge, for oil, forcite, dualin and use of tools.....	1,416 73	
D. M. Prescott, for labor and material, Proprietors of Locks and Canals, for kyanizing lumber, use of rail- road tracks, etc.....	105 49	
Charles Runels, for stone.....	30 33	
E. A. & A. T. Smith, for concrete..	31 36	
O. A. Simpson, for mason work.....	175 85	
James R. Dunning, for hay and teaming.....	58 30	
William P. Foye, for oats, hay and meal.....	60 00	
William E. Livingston, for hay, salt, oats, cement, brick, etc.....	118 09	
Michael Maguire, for hay.....	336 40	
Joseph Miller, for oats and straw...	97 00	
T. J. McDonald, for oats.....	94 45	
A. G. Stiles & Co., for hay and oats,	15 66	
E. S. Sherman & Co., for oatmeal ..	29 12	
E. N. Wood & Co., for straw and oatmeal	21 35	
	58 82	

Amounts carried forward \$8,467 06 \$147,062 22

Amounts brought forward..... \$8,467 06 \$147,062 22

Paid for SUNDRIES:

To A. H. Abbott, for pung	35 00
Willard A. Brown, for leather.....	85
T. M. Bolton, for blankets, repairing harness, etc.....	37 15
A. H. Cluer, for harness trimmings, etc.....	21 13
Thomas Clark, for blacksmithing...	75
H. F. Ebert, for repairing harnesses, etc.....	20 10
Fay Bros. & Hosford, repairing carriage	2 20
T. J. Reynolds, for blacksmithing...	73 70
Edwin Sanborn, repairing carriage,	27 00
Sawyer Carriage Co., repairing car- riage.....	34 79
C. C. Thompson, for shoeing horses,	20 10
Bachelor, Dumas & Co., for blank books, etc.....	164 45
J. B. Coleman, for insurance.....	15 00
Citizen Newspaper Co., for envelopes, etc.....	24 00
Campbell & Hanscom, for paper and postals	4 00
H. C. Church & Son, for insurance, frames, blank books, etc.....	315 85
Engineering News Publishing Co., for subscription.....	5 00
Emma F. K. Estes, for typewriting,	11 88
Fire and Water, for subscription....	3 00
F. Blanche Hard, for typewriting...	11 49
J. H. Jacobs, for rubber bands, blot- ting paper, etc.....	4 25
Lowell Sun, for advertising.....	2 25
Thomas H. Lawler, for blank books, mucilage, etc.....	7 15
Lyon National Pen Manufacturing Co., for pens	3 00
Lyon Platinum Pen Co., for pens...	9 00
J. Merrill & Son, for blank books, directory, stationery, etc.....	35 60
Munn & Co., for advertising.....	12 75
F. E. Rollins, for typewriting.....	1 50
J. L. Severance, for rubber stamps..	1 60

Amounts carried forward..... \$9,371 60 \$147,062 22

Amounts brought forward..... \$9,371 60 \$147,062 22

Paid for SUNDRIES:

To Taylor Bros., for stationery, etc....	5 70
Vox Populi Press, for blank books, envelopes, paper, etc.....	105 25
Wyckoff, Seamans & Benedict, for repairing typewriter, etc.....	14 75
George W. Walker, for atlas of Massachusetts.....	15 00
George Bowers, for travelling ex- penses, postage, etc.....	4 65
Miles F. Brennen, for expenses of Water Board.....	13 50
S. P. Griffin, for horse, use of horse, travelling expenses, etc.....	422 08
Charles L. Knapp, for travelling ex- penses, expenses of Water Board, postage, etc....	545 55
James P. Roberts, for travelling ex- penses.....	5 00
M. F. Wright, for postage, travel- ling expenses, etc.....	10 15
William P. Atwood, for analyses of water.....	38 00
George H. Barrus, for services pre- paring specifications, attendance at hearing, etc.....	495 30
Delbert L. Barker, for driving wells, per contract.....	901 23
T. E. Lennon, for badge....	3 50
Pierce Artesian and Oil Well Supply Co., for driving wells.....	478 17
John F. Stark, for use of "Y" level,	10 00
W. T. Sedgewick, for professional services in examination of Merri- mack River water.....	1,175 00
Vox Populi Press, for printing report of Professor Sedgewick (500 copies).....	128 25
J. Wright, for labor.....	22 00
F. E. Wyllys, for copying report of Professor Sedgewick.....	18 00
D. L. Page & Co., for refreshments..	1 50
Frank E. Shaw, for refreshments...	8 50
A. W. Baker, for veterinary dentistry,	8 00

Amounts carried forward.... \$13,800 68 \$147,062 22

Amounts brought forward..... \$13,800 68 \$147,062 22

Paid for SUNDRIES :

To C. H. Ricker, for professional services.....	18 00	
J. H. Sparks, for professional services.....	4 50	
Stanton & Thurston, for watering street.....	6 75	
Morse & Sparks, for carriage hire and use of horse.....	173 85	
C. H. Hanson, for teaming, etc.....	217 07	
Daniel F. Lyons, for teaming.....	1 00	
American Express Co., for transportation.....	6 35	
Lovejoy-Paul Express Co., for transportation.....	3 80	
New York & Boston Despatch Express Co., for transportation....	5 40	
New England Despatch Co., for transportation.....	75	
Northern Express Co., for transportation.....	30	
G. E. Stanley, for transportation....	295 82	
Boston & Maine Railroad, Lowell System, for transportation.....	23 88	
Boston & Maine Railroad, Southern Division, for transportation.....	2,069 13	
Boston & Maine Railroad, Western Division, for transportation.....	2 29	
	<hr/>	16,629 57

Paid for NEW BUILDING AT
PUMPING STATION :

To Appropriation for Public Buildings, for labor and material.....	\$411 26	
J. W. Bennett & Co., for plans, etc.,	350 73	
Patrick Conlon, for brick work, per contract.....	3,977 00	
Frederick Frye, for furnishing estimates.....	20 00	
Lewis D. Gumb, for labor.....	3 36	
P. O'Hearn, for foundation, per contract.....	2,980 00	
	<hr/>	
<i>Amounts carried forward</i>	\$7,742 35	\$163,691 79

Amounts brought forward..... \$7,742 35 \$163,691 79

Paid for NEW BUILDING AT
PUMPING STATION:

To P. O'Hearn, for mason work and material	125 84	
William H. Wiggin, for carpenter work, per contract.....	6,192 00	
D. M. Prescott, for mason work and material	42 82	
Burnham & Davis, for lumber.....	39 97	
Amasa Pratt & Co., for lumber.....	52 31	
American Bolt Co., for iron, bracket, hanger, etc.....	5 56	
J. W. Bennett & Co., for labor.....	60	
Bartlett & Dow, for vane and hardware	45 12	
Frederick Taylor Co., for nails.....	15	
W. W. Carey, for couplings and labor on shaft.....	12 80	
T. Costello & Co., for pipe, fittings, labor, etc.....	708 26	
Farrell & Conaton, for pipe, fittings, labor, etc.....	787 35	
W. A. Mack & Co., for gutters, conductors, labor, etc.....	136 15	
Lowell Gas Light Co., for meter connections.....	2 00	
E. A. & A. T. Smith, for concrete...	591 04	
J. A. Simpson, for mason work.....	28 00	
William H. Wiggin, for one-half cost of insurance.	5 00	
William E. Livingston, for cement, brick and lime.....	4 38	
C. B. Coburn & Co., for oil... ..	20	
W. H. Spalding & Co., for paper, shellac, etc.....	13 81	
F. E. Rollins, for typewriting.....	13 50	
John F. Stark, for use of "Y" level,	5 00	
Boston & Maine Railroad, for transportation	4 56	
	<hr/>	16,558 77
Total expenditure for the year 1891.....		\$180,250 56
Balance undrawn Dec. 31, 1891.....		26,558 53
		<hr/>
		\$206,809 09
		<hr/>

Annual Expenditures on Account of the Water Works
from the Commencement to Jan. 1, 1892.

Expended in	1870.....	\$95,057 00
"	1871.....	624,151 66
"	1872.....	560,708 40
"	1873.....	349,717 87
"	1874.....	233,370 63
"	1875.....	275,660 78
"	1876.....	221,502 24
"	1877.....	163,814 28
"	1878.....	158,510 15
"	1879.....	150,047 82
"	1880.....	154,391 59
"	1881.....	231,171 27
"	1882.....	173,645 92
"	1883.....	180,280 28
"	1884.....	175,290 02
"	1885.....	176,972 66
"	1886.....	169,105 22
"	1887.....	176,950 05
"	1888.....	183,279 73
"	1889.....	193,535 48
"	1890.....	194,108 32
"	1891.....	180,250 56
Total expenditure to Jan. 1, 1892.....		\$5,072,616 29
Total receipts to Jan. 1, 1892.....		2,659,451 67
Net cost of Water Works to Jan. 1, 1892.....		<u>\$2,413,164 62</u>

NEW PUMPING ENGINE.

Received from LOWELL INSTITUTION FOR SAVINGS ON LOAN	\$60,000 00	
	<hr/>	\$60,000 00

EXPENDITURES.

Paid for SUNDRIES :

To Appropriation for Roads and Bridges, for crushed stone.....	\$18 00
Appropriation for Public Buildings, for labor.....	166 74
Appropriation for Water Works, for payment of sundry bills.....	2,538 40
J. W. Bennett & Co., for plans.....	184 00
J. W. Bennett & Co., for labor and material (contract).....	4,452 00
J. W. Bennett & Co., for labor and material.....	1,258 36
Bennett & Conlon, for labor and material	3,390 05
Patrick Corcoran, for labor and material for foundation.....	1,809 39
Lewis D. Gumb, for stone and labor,	134 18
Robert Goulding, for slating... ..	165 66
John F. Murphy & Co., for brick work, per contract.....	2,325 00
John F. Murphy & Co., for labor and material	107 97
James Mahan, for engine bed.....	233 12
Scannell & Wholey, for boilers.....	2,460 00
Henry R. Worthington, on account of pumping engine	26,412 81
Burnham, Forrest & Davis, for lumber.....	27 80
Burnham & Davis, for lumber.....	14 69
<i>Amount carried forward.....</i>	<hr/> \$45,698 17

Amount brought forward..... \$45,698 17

Paid for SUNDRIES :

To Howe Bros. & Co., for lumber.....	11 90
Amasa Pratt & Co., for lumber.....	57 09
American Bolt Co., for rods, bolts, washers, etc.....	54 82
Buff & Berger, for leveling instru- ment, etc.....	10 40
H. R. Barker Manufacturing Co., for water gauge.....	2 10
Boutwell Bros., for castings.....	11 88
Bartlett & Dow, for hardware.....	8 72
T. Costello & Co., for plumbing, fit- tings, etc.....	290 74
Farrell & Conaton, for pipe, fittings, labor, etc.....	1,113 47
Locke Bros., for damper regulator..	150 00
W. A. Mack & Co., for gutters, caps, etc.....	233 94
Whittier Machine Co., for sluice gates.....	500 00
H. B. Shattuck, for chain.....	5 85
Seannell & Wholey, for heater, cast- ings, cold air box, etc.....	430 16
George W. Anderson, for brick....	387 45
Edward Cawley, for cement.....	410 00
H. E. Fletcher & Co., for stone....	144 00
William E. Livingston, for brick, sand, gravel, etc.....	84 50
Charles Runels, for stone.....	88 63
Waldo Bros. for fire brick.....	90 00
George Bowers, for travelling ex- penses.....	15 00
Miles F. Brennen, for expenses of Committee.....	285 72
Charles L. Knapp, for travelling ex- penses, expenses of Committee, etc.....	48 30
George A. Nelson, for travelling ex- penses.....	2 64
George H. Barrus, for professional services.....	701 30
Frank E. Shaw, for refreshments...	12 60
C. B. Coburn & Co., for alcohol and packing.....	16 03
W. H. Spalding & Co., for paper...	4 50

Amount carried forward..... \$50,869 91

Amount brought forward..... \$50,869 91

Paid for SUNDRIES :

To Citizen Newspaper Co., for advertising	1 87	
Lowell Morning Times, for advertising	1 50	
Morning Mail Co., for advertising...	2 17	
Vox Populi Press, for printing.....	2 00	
Western Union Telegraph Co., for telegrams	5 13	
Morse & Sparks, for carriage hire and use of horse.....	26 25	
James R. Dunning, for teaming....	75 00	
C. H. Hanson, for teaming.....	43 40	
Daniel McCarthy, for teaming.....	2 00	
Boston & Maine Railroad, for transportation	2 23	
Boston & Maine Railroad, Western Division, for transportation.....	63 00	
		<hr/>
Total expenditure for the year 1891.....		51,094 46
Balance undrawn, Dec. 31, 1891.....		8,905 54
		<hr/>
		\$60,000 00
		<hr/>

SALARIES.

Balance undrawn, Jan. 1, 1891.....	\$457 29	
Appropriated and assessed in 1891.....	20,000 00	
Transferred from Reserved Fund.....	6,000 00	
	<hr/>	<hr/> \$26,457 29 <hr/>

EXPENDITURES.

Paid SALARIES OF SUNDRY OFFICERS:

To George W. Fifield, Mayor.....	\$2,000 00
Austin K. Chadwick, City Treasurer and Collector of Taxes.....	2,500 00
Girard P. Dadman, City Clerk.....	53 23
Michael J. Dowd, City Clerk.	1,746 77
David Chase, Auditor of Accounts and Clerk of the Common Council	1,800 00
Larkin T. Trull, City Solicitor.....	283 33
John J. Hogan, City Solicitor	1,416 67
Henry Hoole, City Messenger.....	1,100 00
J. Arthur Gage, City Physician.....	35 75
William P. Lawler, City Physician..	664 25
James R. Fulton, Sealer of Weights and Measures.....	55 65
Nathaniel E. Annis, Sealer of Weights and Measures.....	244 35
Samuel Hanson, Milk Inspector . . .	17 74
Thomas O. Allen, Milk Inspector... .	282 26
Joseph J. Adams, Fish Warden....	2 04
Orrin C. Carleton, Fish Warden....	37 96
William Seaver, Pound Keeper....	25 00
Abel Wheeler, Assessor of Taxes (Chairman).....	2,250 00
James Scott, Assessor of Taxes (Secretary)	2,250 00
Nathan D. Pratt, Assessor of Taxes,	2,250 00
<i>Amount carried forward.....</i>	<hr/> \$19,015 00 <hr/>

Amount brought forward..... \$19,015 00

Paid SALARIES OF SUNDRY
OFFICERS:

To Henry C. Dexter, Assistant As-		
sessor.....	48	39
Fred N. Edgell, Assistant Assessor,	1,000	00
Robert L. Read, Assistant Assessor,	1,000	00
George S. Cheney, Assistant As-		
sessor.....	1,000	00
John E. Maguire, Assistant Assessor,	1,000	00
C. Arthur Abbott, Assistant As-		
sessor.....	951	61
Michael J. Garvey, Assistant As-		
sessor.....	951	61
John P. Mahoney, Registrar of		
Voters (Chairman).....	450	00
John B. Coleman, Registrar of		
Voters	400	00
Charles H. McIntire, Registrar of		
Voters	400	00
Michael J. Dowd, Registrar of		
Voters (Secretary).	200	00
		<hr/>
Total expenditure for the year 1891. . .		26,416 61
Balance undrawn, Dec. 31, 1891		40 68
		<hr/>
		\$26,457 29
		<hr/>

STATE AID.

For Disabled Soldiers and Sailors and their Families, and for the Families of the Slain, under an Act of the Legislature of the Commonwealth, Chapter 192, approved May 4, 1877, and previous acts:

Due from Commonwealth Jan. 1, 1892. .	\$9,044 57	
	<hr/>	\$9,044 57
		<hr/>

STATE AID.

Paid for AID RENDERED DIS-
ABLED SOLDIERS AND
SAILORS AND THEIR FAM-
ILIES, AND THE FAMILIES
OF DECEASED SOLDIERS
AND SAILORS:

Balance undrawn Jan. 1, 1891.....	\$8,247 32	
Appropriation	5,000 00	
	<hr/>	\$13,247 32

RECEIPTS.

Received into the Treasury on account
of STATE AID:

From Commonwealth, for reimbursement of State Aid of 1890	\$12,723 50
--	-------------

Sundry persons amounts returned
to Treasury as follows:

S. G. Austin.....	3 00
John Briggs.....	4 00
L. T. Bradford.....	4 00
J. M. Brown.....	4 00
Henry Burns	4 00
C. H. Browning.....	5 00
F. A. Crosby	4 00
William Cross	4 00
James Christie	4 00
Patrick Cusack.....	50
R. F. Crowell.....	4 00
J. Campbell.....	6 00
J. Connelly.....	4 00
M. H. Clough.....	4 00
William Darby.....	4 00
Thomas Dever.....	4 00

<i>Amount carried forward</i>	<hr/> \$12,786 00
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<i>Amounts brought forward</i>	\$12,786 00	\$13,247 32
--------------------------------------	-------------	-------------

Received into the Treasury on account
of STATE AID:

From Sundry persons amounts returned
to Treasury as follows:

William Daily	4 00
Dudley Davis.....	2 00
E. Davenport.....	2 00
Patrick Flannagan	3 00
Thomas Fisher	4 00
George Hughes	6 00
William W. Hill	4 00
A. Hanfield.....	4 00
C. C. Howe.....	2 00
John Harrington.....	2 00
S. Handlen.....	2 00
Michael Keough	10 00
Michael Lahiff.....	12 00
W. F. Lyman	1 00
James Mullen.....	4 00
Daniel Murphy.....	12 00
Thomas Murphy	4 00
James McGuire.....	4 00
J. L. Mellen	3 00
Joseph Mason.....	14 00
John Mead.....	1 00
James McGuirk.....	8 00
J. Murphy.....	4 00
J. McAnaney	2 00
P. McGovern.....	1 00
Lewis Monroe	4 00
C. E. Nickles	4 00
Caleb Philbrick.....	4 00
M. F. Powers.....	1 50
John Reagen.....	12 00
John Roach.....	6 00
J. B. Ripley.....	4 00
E. C. Scully.....	20 00
Patrick Sullivan.....	4 00
P. D. Small	4 50
M. Smith.....	4 00
Almon Smith.....	2 00
William D. Smith.....	6 00
P. Trainor.....	28 00

<i>Amounts carried forward</i>	\$13,005 00	\$13,247 32
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Amounts brought forward..... \$13,005 00 \$13,247 32

Received into the Treasury on account
of STATE AID:

From Sundry persons amounts returned
to Treasury as follows:

Thomas Toole.....	4 00	
Hugh Tully	12 00	
Francis D. Turner.....	4 00	
E. L. Wade	4 00	
		<hr/>
		13,029 00
		<hr/>
		\$26,276 32
		<hr/>

EXPENDITURES.

Paid Sundry persons, for aid rendered in 1891, as per pay rolls	\$14,433 75	
Thomas H. Lawler, for envelopes..	14 00	
H. M. Potter, for travelling expenses, postage, etc.....	32 50	
Morse & Sparks, for carriage hire..	3 50	
		<hr/>
Total expenditures for the year 1891		\$14,483 75
Balance undrawn, Dec. 31, 1891		11,792 57
		<hr/>
		\$26,276 32
		<hr/>

AID FOR INDIGENT SOLDIERS AND SAILORS.

Balance undrawn, Jan. 1, 1891.....	\$3,733 65	
Appropriation.....	5,000 00	
		\$8,733 65

RECEIPTS.

Received into the Treasury on account
of AID FOR INDIGENT SOL-
DIERS AND SAILORS :

From Commonwealth, for reimbursement of aid for 1890.....	\$4,121 00
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Sundry persons, amounts returned
to Treasury as follows :

C. C. Atwood.....	2 00
Leonard Brown.....	5 00
Patrick Cannon.....	3 00
Richard Cummings.....	18 00
J. Campbell.....	10 00
Thomas Conley.....	6 00
James Duffy.....	12 00
B. F. Foster.....	6 00
John Gaffney.....	12 00
L. F. Howard.....	3 00
W. H. Kaulback.....	10 00
Thomas McLeuney.....	10 00
Thomas Mangan.....	4 00
James O'Connell.....	4 00
Dennis Sullivan.....	12 00
John B. Smith.....	8 00
Michael Sullivan.....	6 00
M. Ward.....	2 00

4,254 00

\$12,987 65

EXPENDITURES.

Paid Sundry persons, for aid rendered in 1891, as per pay rolls.....	\$8,217 00	
	<hr/>	\$8,217 00
Balance undrawn, Dec. 31, 1891.....		4,770 65
		<hr/>
		\$12,987 65
		<hr/>

CITY DEBT.

Balance undrawn, Jan. 1, 1891.....	\$95,073 37	
Appropriated and assessed in 1891.....	139,800 00	
	<hr/>	\$234,873 37

RECEIPTS.

Received into the Treasury on account
of CITY DEBT:

From Blake Bros. & Co., for two hundred \$1,000 Water Loan Bonds, dated Nov. 1, 1890....	\$200,000 00	
Commissioners of Sinking Funds, for note due Lowell Institution for Savings, dated Dec. 1, 1881.....	5,000 00	
	<hr/>	205,000 00
		<hr/>
		\$439,873 37
		<hr/>

EXPENDITURES.

Paid on account of WATER DEBT:

To Sundry persons, for eighty-six Water Loan Bonds, which matured Nov. 1, 1890.....	\$86,000 00	
Lowell Institution for Savings, note dated May 1, 1871.....	200,000 00	
	<hr/>	\$286,000 00

Paid on account of ORDINARY CITY
DEBT:

To Sundry persons, for bonds which matured during the year 1891..	\$22,500 00	
Lowell Institution for Savings, note dated Dec. 1, 1881.....	5,000 00	
	<hr/>	
<i>Amounts carried forward.....</i>	\$27,500 00	\$286,000 00

Amounts brought forward..... \$27,500 00 \$286,000 00

Paid on account of ORDINARY CITY
DEBT:

To Lowell Institution for Savings, instalments on notes.....	46,800 00	
Commissioners of Sinking Funds, instalments on notes.....	38,100 00	
Blake Bros. & Co., instalment on note	22,000 00	
Essex Savings Bank, instalment on note	5,400 00	
Salem Five Cent Savings Bank, instalment on note.....	5,000 00	
	<hr/>	144,800 00
Total expenditure for the year 1891.....		\$430,800 00
Balance undrawn, Dec. 31, 1891.....		9,073 37
		<hr/>
		\$439,873 37
		<hr/>

INTEREST.

Balance undrawn, Jan. 1, 1891.....	\$2,266 00	
Appropriation.....	75,000 00	
	<hr/>	\$77,266 00

RECEIPTS.

Received into the Treasury on account
of INTEREST:

From Sundry persons, for interest on taxes	\$6,797 09	
Lowell Institution for Savings, for premium on notes.....	650 00	
First National Bank, for interest on daily balances.....	1,904 88	
Lowell Trust Co., for interest on daily balances.....	1,555 63	
	<hr/>	10,907 60
		<hr/>
		<u>\$88,173 60</u>

EXPENDITURES.

Paid on account of INTEREST:

To City Institution for Savings, (on tem- porary loan).....	\$1,198 25
Lowell Institution for Savings, (on temporary loan).....	2,059 37
Commissioners of Sinking Funds, (temporary loan).....	712 50
Lowell Institution for Savings.....	34,163 95
Lowell Five Cent Savings Bank....	1,625 00
Salem Five Cent Savings Bank....	1,600 00
Essex Savings Bank.....	1,728 00
Commissioners of Sinking Funds...	9,168 00
	<hr/>
<i>Amount carried forward.....</i>	<i>\$52,255 07</i>

Amount brought forward..... \$52,255 07

Paid on account of INTEREST :

To Trustees of Est. Thomas Nesmith...	1,560 00	
Trustees of Est. Jonathan Tyler....	600 00	
Blake Bros. & Co.....	7,920 00	
Sundry persons, for interest coupons on Central Bridge Bonds.....	4,800 00	
Sundry persons, for interest coupons on Sewer Loan Bonds.....	8,190 00	
Sundry persons, for interest coupons on City Hall and Memorial Building Bonds.....	8,700 00	
Sundry persons, for interest coupons on High School Building Bonds,	3,000 00	
D. J. Murphy, for interest on taxes,	3 83	
Daniel Mahoney, for interest on taxes,	1 73	
Sophia Lyons, for interest on taxes,	84	
Leonard Huntress, for interest on taxes	2 49	
		<hr/>
Total expenditure for the year 1891.....		\$87,033 96
Balance undrawn, Dec. 31, 1891.....		1,139 64
		<hr/>
		\$88,173 60
		<hr/>

NATIONAL BANK TAX.

Balance undrawn, Jan. 1, 1891..	\$5,426 02	
Assessed on stocks in National Banks, owned by non-residents in 1891.	15,956 07	
Received from Commonwealth, on account of tax of 1891.	4,697 58	
	<hr/>	\$26,079 67
		<hr/>

EXPENDITURES.

Paid Fund for Ordinary City Debt.	\$5,268 52	
Commonwealth, on account of tax 1890	157 50	
Commonwealth, on account of tax 1891.	15,944 97	
	<hr/>	
Total expenditure for the year 1891.		\$21,370 99
Balance undrawn, Dec. 31, 1891.		4,708 68
		<hr/>
		\$26,079 67
		<hr/>

STATE TAX.

Assessed in 1891.....	\$47,694 29	
	<hr/>	<u>\$47,694 29</u>

EXPENDITURES.

Paid Commonwealth, State Tax of 1890, (ordinary)	\$42,780 00	
Commonwealth, on account of Ar- mory Loan.....	1,764 29	
Commonwealth, on account of inter- est on Armory Loan.....	3,150 00	
	<hr/>	<u>\$47,694 29</u>

COUNTY TAX.

Assessed in 1891.....	\$45,922 74	
	<hr/>	<u>\$45,922 74</u>

EXPENDITURES.

Paid County of Middlesex, County Tax for 1891.....	\$45,922 74	
	<hr/>	<u>\$45,922 74</u>

TAXES.

The amount of Taxes assessed on the Polls and on the Real and Personal Estate, within the City of Lowell, for the year 1891, was as follows, viz. :

Valuation of, and Tax on, Real and Personal Property.

VALUATION.		RATE.	TAX.
Of Personal Property,	\$17,535,390	\$15.60 per \$1,000	\$273,552 08
Real Estate,	46,552,885	15.60 per 1,000	726,225 01
Total Valuation,	<u>\$64,088,275</u>	Tax on Property,	<u>\$999,777 09</u>
Number of Polls, 20,931, at \$2.00 each..		\$41,862 00	
Number of Polls, 87, at 50 cents each...		43 50	
		<u> </u>	41,905 50
			<u>\$1,041,682 59</u>
Tax assessed on Shares of Stock in the National Banks of Lowell held by non-residents, and which are not included in the City Valuation.....		\$15,956 07	
		<u> </u>	\$15,956 07
Grand Tax Total.....			<u><u>\$1,057,638 66</u></u>

Appropriated and Assessed in 1891.

For City Appropriation.....	\$918,200 00
State Tax.....	47,694 29
County Tax.....	45,922 74
National Bank Tax (non-residents).....	15,956 07
Overlays.....	29,865 56
	<u> </u>
Total Tax Levy.....	<u><u>\$1,057,638 66</u></u>

TAXES.

	Due Jan. 1, 1891. Assessed in 1891.	Abated in 1891.	Collected in 1891.	Due December 31, 1891.
Taxes of 1887,	\$11,528 26	\$11,309 38		\$218 88
Taxes of 1888,	14,160 02	13,616 30	\$79 17	464 55
Taxes of 1889,	64,187 51	71 32	30,402 48	33,713 71
Taxes of 1890,	155,033 34	724 83	93,495 45	60,813 06
Taxes of 1891,	1,057,638 66	6,404 77	906,629 59	144,604 30
	\$1,302,547 79	\$32,126 60	\$1,030,606 69	\$239,814 50

ABATEMENT OF TAXES.

Balance undrawn, Jan. 1, 1891.....	\$52,562 82	
Overlays assessed in 1891.....	29,865 56	
	<hr/>	<u>\$82,428 38</u>

ABATEMENTS.

To Merrimack Manufacturing Co., on tax of 1887.....	\$8,022 53
Merrimack Manufacturing Co., on tax of 1888.....	8,884 90
Merrimack Manufacturing Co., on tax of 1889.....	7,932 20
Merrimack Manufacturing Co., on tax of 1890.....	1,608 20
Massachusetts Cotton Mills, on tax of 1888.....	3,707 00
Massachusetts Cotton Mills, on tax of 1889.....	2,305 20
Massachusetts Cotton Mills, on tax of 1890.....	680 00
Tremont & Suffolk Mills, on tax of 1887.....	108 87
Tremont & Suffolk Mills, on tax of 1888.....	3,697 82
Tremont & Suffolk Mills, on tax of 1889.....	2,440 64
Tremont & Suffolk Mills, on tax of 1890.....	127 51
Alexander E. Blanchard, on tax of 1890.....	2 00
William H. Anderson, on tax of 1890.....	1 78
Leonard Huntress, on tax of 1890..	40 80
Olive A. Pike, on tax of 1890.....	39 61
Sophia Lyons, on tax of 1890.....	24 82
John T. Campbell, on tax of 1891..	37 13
	<hr/>
<i>Amount carried forward.....</i>	<u>\$39,661 01</u>

<i>Amount brought forward</i>	\$39,661 01	
To Est. Ann Coleman, on tax of 1891..	15 60	
George W. Flint, on tax of 1891...	13 81	
Samuel N. Harris, on tax of 1891...	2 65	
J. Westwood & Co., on tax of 1891..	3 35	
Daniel Mahoney, on tax of 1889....	16 01	
Charles S. Bean, on tax of 1891....	2 03	
George L. Cady, on tax of 1891 ...	30 06	
Heirs F. A. Hildreth, on tax of 1891,	28 70	
Julia Kelly, on tax of 1891.....	3 90	
James Meadowcroft, on tax of 1891,	22 70	
William C. Stevenson, on tax of 1891,	14 04	
Daniel Swan, on tax of 1891.....	35 88	
Est. Fred H. Wood, on tax of 1891,	22 46	
Jennie Willard, on tax of 1891.....	54 60	
William H. Anderson, on tax of 1891,	8 74	
James Boyd, on tax of 1891	2 00	
Jere Champlin, on tax of 1891.....	7 61	
Ira W. Dunlap, on tax of 1891	7 80	
Mary E. Foss, on tax of 1891.....	7 80	
A. D. & H. C. Gordon, on tax of 1891,	4 99	
Sundry persons, on tax of 1887 (be- fore payment).....	11,309 38	
Sundry persons, on tax of 1888 (be- fore payment).....	13,616 30	
Sundry persons, on tax of 1889 (be- fore payment).....	71 32	
Sundry persons, on tax of 1890 (be- fore payment).....	724 83	
Sundry persons, on tax of 1891 (be- fore payment).....	6,404 77	
	<hr/>	\$72,092 34
Balance undrawn, Dec. 31, 1891.....		10,336 04
		<hr/>
		\$82,428 38
		<hr/>

TEMPORARY LOANS.

RECEIPTS.

Received into the Treasury on account
of TEMPORARY LOANS:

From Lowell Institution for Savings....	\$200,000 00	
City Institution for Savings.....	50,000 00	
Commissioners of Sinking Fund. .	75,000 00	
	<hr/>	\$325,000 00
		<hr/>

PAYMENTS.

To Lowell Institution for Savings.....	\$200,000 00	
City Institution for Savings.....	50,000 00	
Commissioners of Sinking Fund ...	75,000 00	
	<hr/>	\$325,000 00
		<hr/>

SINKING FUND.

High School Sinking Fund.

RECEIPTS.

From City Institution for Savings, premium and accrued interest on bonds.....	\$1,451 10	
National Hide and Leather Bank, premium and accrued interest on bonds.....	2,280 00	
	<u> </u>	\$3,731 10
Paid Commissioners of Sinking Funds..	\$3,731 10	
	<u> </u>	<u>\$3,731 10</u>

City Hall and Memorial Building Sinking Fund.

Appropriated and assessed in 1891.....	\$7,500 00	
	<u> </u>	\$7,500 00

RECEIPTS.

From Barnard & Stanwood, premium and interest on bonds.....	\$383 05	
Blake Bros. & Co., premium and accrued interest on bonds....	5,411 11	
Kidder, Peabody & Co., premium and accrued interest on bonds,	2,016 67	
National Hide and Leather Bank, premium and accrued interest on bonds.....	1,200 00	
	<u> </u>	9,010 83
		<u>\$16,510 83</u>
Paid Commissioners of Sinking Funds..	\$16,510 83	
	<u> </u>	<u>\$16,510 83</u>

Water Loan Sinking Fund.

Appropriated and assessed in 1891.....	\$16,000 00	
	<u> </u>	\$16,000 00
Received from Blake Bros. & Co., for premium on bonds.....	\$10,000 00	
	<u> </u>	10,000 00
		<u> </u>
		\$26,000 00
		<u> </u>
Paid Commissioners of Sinking Funds..	\$26,000 00	
	<u> </u>	\$26,000 00
		<u> </u>

Sinking Fund for the High Service Water Supply.

Appropriated and assessed in 1891.....	\$1,800 00	
	<u> </u>	\$1,800 00
		<u> </u>
Paid Commissioners of Sinking Funds..	\$1,800 00	
	<u> </u>	\$1,800 00
		<u> </u>

Sinking Fund for the Payment of the Loan of 1882.

Appropriated and assessed in 1891.....	\$2,500 00	
	<u> </u>	\$2,500 00
		<u> </u>
Paid Commissioners of Sinking Funds..	\$2,500 00	
	<u> </u>	\$2,500 00
		<u> </u>

Sinking Fund for New Buildings at City Farm.

Appropriated and assessed in 1891.....	\$5,000 00	
	<u> </u>	\$5,000 00
		<u> </u>
Paid Commissioners of Sinking Funds..	\$5,000 00	
	<u> </u>	\$5,000 00
		<u> </u>

Aiken Street Sinking Fund.

Appropriated and assessed in 1891.....	\$16,000 00	
	<u> </u>	\$16,000 00
		<u> </u>
Paid Commissioners of Sinking Funds..	\$16,000 00	
	<u> </u>	\$16,000 00
		<u> </u>

Central Bridge Sinking Fund.

Appropriated and assessed in 1891.....	\$9,600 00	
	<u> </u>	\$9,600 00
Paid Commissioners of Sinking Funds..	\$9,600 00	
	<u> </u>	\$9,600 00
		<u> </u>

Intercepting Sewer Fund.

Appropriated and assessed in 1891.....	\$5,000 00	
	<u> </u>	\$5,000 00
Paid Commissioners of Sinking Funds..	\$5,000 00	
	<u> </u>	\$5,000 00
		<u> </u>

FUND FOR THE REDUCTION OF THE ORDINARY CITY DEBT.

Balance undrawn, Jan. 1, 1891.....	\$49,486 64	
	\$49,486 64	

RECEIPTS.

From Commonwealth, on account of Corporation Tax of 1890....	\$2,595 14	
Commonwealth, on account of Corporation Tax of 1891....	54,636 04	
National Bank Tax Account (balance)	5,268 52	
	62,499 70	
		\$111,986 34

PAYMENTS.

To Commonwealth, on account of Corporation Tax of 1890.....	\$50 99	
Commissioners of Sinking Funds...	57,299 31	
	\$57,350 30	
Balance undrawn, Dec. 31, 1891.....		54,636 04
		\$111,986 34

CARNEY MEDAL FUND.

* Received of James G. Carney, Esq., in 1858 and 1859, the amount of two hundred dollars, which is to remain a perpetual debt of the City forever; the interest to be applied in payment for the "Carney Medals" to the de- partments of the High School annu- ally.....			\$200 00	
			<hr/>	\$200 00
Undrawn, Dec. 31, 1891.....				<hr/> \$200 00

* One hundred dollars was donated Aug. 24, 1858, and accepted by the City Council Sept. 14, 1858, and one hundred dollars additional, July 16, 1859, and accepted July 26, 1859. For the information of the citizens of Lowell, the Auditor respectfully refers them to the "Annual Report of the School Committee" for the year 1859, where all the correspondence between the donor and the recipient may be found.

SINKING FUNDS.

The value of the several Sinking Funds, Jan. 1, 1892, which apply to the reduction of the Water Debt, as reported by the Commissioners of Sinking Funds, is as follows:

Water Loan Sinking Fund.....	\$62,349 77	
Sinking Fund for the High Service Water Supply.....	20,272 34	
	<hr/>	\$82,622 11

The value of the several Sinking Funds, Jan. 1, 1892, which apply to the reduction of the Ordinary City Debt, as reported by the Commissioners of Sinking Funds, is as follows:

Aiken Street Sinking Fund.....	\$189,509 42	
Sinking Fund for the Payment of the Loan of 1882.....	26,544 30	
Sinking Fund for New Buildings at City Farm.....	52,865 42	
Central Bridge Sinking Fund.....	100,840 30	
Intercepting Sewer Fund.....	47,845 10	
Fund for the Payment of the Ordinary City Debt.....	357,165 56	
City Hall and Memorial Building Sinking Fund.....	22,994 79	
High School Sinking Fund.....	3,762 57	
	<hr/>	801,527 46
Total value of the Sinking Funds, Dec. 31, 1891.....		<hr/> \$884,149 57 <hr/>
The value of the Hapgood Wright Centennial Trust Fund, Dec. 31, 1891...	\$1,950 43	
	<hr/>	<hr/> \$1,950 43 <hr/>

APPROPRIATIONS FOR 1891.

Schools	\$160,000 00	
School-houses	25,000 00	
Roads and Bridges.....	75,000 00	
Paupers.....	55,000 00	
Police	70,000 00	
Fire Department.....	80,000 00	
Sewers and Drains.....	20,000 00	
Improvement in Andover Street Sewer System.....	3,000 00	
Commons.....	8,000 00	
Printing and advertising.....	7,000 00	
Lighting.....	55,000 00	
Public Buildings.....	15,000 00	
Library.....	12,000 00	
Health.....	25,000 00	
Salaries	20,000 00	
State Aid.....	5,000 00	
Aid for Indigent Soldiers and Sailors....	5,000 00	
Interest	75,000 00	
City Debt.....	139,800 00	
Water Loan Sinking Fund.....	16,000 00	
City Hall and Memorial Building Sinking Fund	7,500 00	
Sinking Fund for Loan of 1882.	2,500 00	
Aiken Street Sinking Fund.....	16,000 00	
Sinking Fund for High Service Water Supply	1,800 00	
Sinking Fund for New Buildings at City Farm.....	5,000 00	
Central Bridge Sinking Fund.....	9,600 00	
Intercepting Sewer Fund.....	5,000 00	
	<hr/>	\$918,200 00

DUE FROM THE CITY ON ORDINARY CITY DEBT.

December 31, 1891.

Date of Notes.	To Whom Payable.	Amount.	Per Cent.	Interest, When Due.	Interest Due in 1892.	Notes and Instalments, When Due.
*1871, March 6,	Bequest of Thomas Nesmith.....	\$25,000 00	6	March 6 and Sept. 6,	\$1,500 00	Perpetual Debt.
†1871, Apr. 10.	Bequest of Thomas Nesmith.....	1,000 00	6	April 10 and Oct. 10,	60 00	Perpetual Debt.
1874, Aug. 7,	Lowell Institution for Savings.....	100,000 00	6½	Feb. 7 and Aug. 7,	6,500 00	1894, Aug. 7.
1874, Nov. 25,	Lowell Five Cent Savings Bank.....	25,000 00	6½	May 25 and Nov. 25,	1,625 00	1894, Nov. 25.
†1878, May 10,	Bequest of Jonathan Tyler.....	10,000 00	6	May 10 and Nov. 10,	600 00	Perpetual Debt.
1882, May 1,	Lowell Institution for Savings.....	195,000 00	4	May 1 and Nov. 1,	3,900 00	1892, May 1.
1882, June 9,	Lowell Institution for Savings.....	60,000 00	4	June 9 and Dec. 9,	1,200 00	1892, June 9.
1882, Sept. 1,	Lowell Institution for Savings.....	30,000 00	4	March 1 and Sept. 1,	1,200 00	1892, Sept. 1.
1882, Oct. 2,	Intercepting Sewer Bonds.....	56,000 00	4	April 2 and Oct. 2,	2,240 00	1902, Oct. 2.
1882, Nov. 1,	Brewster, Bassett & Co. (bonds).....	120,000 00	4	May 1 and Nov. 1,	4,800 00	1892, Nov. 1.
1883, Apr. 2,	Perkins, Dupee & Co. (bonds).....	94,000 00	4	April 2 and Oct. 2,	3,760 00	1903, April 2.
1883, May 1,	Perkins, Dupee & Co. (bonds).....	15,000 00	4	May 1 and Nov. 1,	450 00	1892, May 1, \$7,500.
1883, June 20,	Perkins, Dupee & Co. (bonds).....	30,000 00	4	June 20 and Dec. 20,	900 00	1892, June 20, \$15,000.
1883, Dec. 15,	Lowell Institution for Savings.....	17,000 00	4	June 15 and Dec. 15,	680 00	1892, Dec. 15, \$8,500.
1883, Dec. 15,	Lowell Institution for Savings.....	15,400 00	4	June 15 and Dec. 15,	616 00	1892, Dec. 15, \$7,700.
1884, July 1,	Commissioners of Sinking Funds.....	4,950 00	4	Jan. 1 and July 1,	198 00	1892, July 1, \$1,650.
1884, Aug. 4,	Commissioners of Sinking Funds.....	22,500 00	4	Feb. 4 and Aug. 4,	900 00	1892, Aug. 4, \$7,500.
1885, Jan. 15,	Lowell Institution for Savings.....	12,000 00	4	Jan. 15 and July 15,	420 00	1892, Jan. 15, \$3,000.
1885, July 24,	Commissioners of Sinking Funds.....	14,000 00	3½	Jan. 24 and July 24,	490 00	1892, July 24, \$3,500.
1885, Sept. 19,	Commissioners of Sinking Funds.....	8,000 00	3½	March 19 and Sept. 19,	280 00	1892, Sept. 19, \$2,000.
1885, Sept. 19,	Commissioners of Sinking Funds.....	6,000 00	3½	March 19 and Sept. 19,	210 00	1892, Sept. 19, \$1,500.
1887, Aug. 11,	Commissioners of Sinking Funds.....	30,000 00	4½	Feb. 11 and Aug. 11,	1,350 00	1892, Aug. 11, \$5,000.
1887, Oct. 14,	Commissioners of Sinking Funds.....	2,000 00	4½	April 14 and Oct. 14,	90 00	1892, Oct. 14, \$2,000.
1887, Dec. 2,	Commissioners of Sinking Funds.....	2,000 00	4½	June 2 and Dec. 2,	90 00	1892, Dec. 2, \$2,000.
1888, Aug. 1,	Lowell Institution for Savings.....	42,000 00	4	Feb. 1 and Aug. 1,	1,680 00	1882, Aug. 1, \$6,000.
1888, Aug. 7,	Dupee & Sargent.....	35,000 00	4	Feb. 7 and Aug. 7,	1,400 00	1892, Aug. 7, \$5,000.
1888, Sept. 1,	Commissioners of Sinking Funds.....	55,650 00	4	March 1 and Sept. 1,	2,226 00	1892, Sept. 1, \$7,950.
1888, Dec. 1,	Lowell Institution for Savings.....	8,000 00	4	June 1 and Dec. 1,	320 00	1892, Dec. 1, \$4,000.
1888, Dec. 21,	F. S. Moseley & Co.....	37,800 00	4	June 21 and Dec. 21,	1,512 00	1892, Dec. 21, \$5,400.
1889, March 4,	Lowell Institution for Savings.....	32,000 00	4	March 4 and Sept. 4,	1,200 00	1892, March 4, \$4,000.
1889, May 22,	Lowell Institution for Savings.....	20,000 00	3%	May 22 and Nov. 22,	679 69	1892, May 22, \$2,500.
1889, June 3,	Lowell Institution for Savings.....	24,000 00	3%	June 3 and Dec. 3,	815 63	1892, June 3, \$3,000.
1889, Dec. 1,	Blake Bros. & Co. (bond).....	176,000 00	4	June 1 and Dec. 1,	7,040 00	1892, Dec. 1, \$22,000.
1890, July 16,	Lowell Institution for Savings.....	31,500 00	4	Jan. 16 and July 16,	1,260 00	1892, July 16, \$3,500.
1890, Nov. 29,	Lowell Institution for Savings.....	41,400 00	4	May 29 and Nov. 29,	1,656 00	1892, Nov. 29, \$4,600.
1890, Oct. 1,	City Hall and Memorial Building Bonds...	350,000 00	4	April 1 and Oct. 1,	14,000 00	1920, Oct. 1.
1890, Dec. 23,	Commissioners of Sinking Funds.....	45,000 00	4	June 23 and Dec. 23,	1,800 00	1892, Dec. 23, \$5,000.
1891, May 16,	Lowell Institution for Savings.....	100,000 00	4	May 16 and Oct. 16,	3,800 00	1892, May 16, \$10,000.
1891, April 1,	Sundry Persons (bonds).....	150,000 00	4	April 1 and Oct. 1,	6,000 00	1921, April 1.
1891, July 6,	Lowell Institution for Savings.....	60,000 00	4	Jan. 6 and July 6,	2,400 00	1892, July 6, \$6,000.
1891, Sept. 14,	Lowell Institution for Savings.....	47,000 00	4	March 14 and Sept. 14,	1,880 00	1892, Sept. 14, \$4,700.
1891, Oct. 19,	Central Savings Bank.....	19,000 00	4	April 19 and Oct. 19,	760 00	1892, Oct. 19, \$1,900.
1891, Nov. 28,	Lowell Institution for Savings.....	55,000 00	4	May 28 and Nov. 28,	2,200 00	1892, Nov. 28, \$5,500.
1891, Dec. 23,	Commissioners of Sinking Funds.....	45,000 00	4	June 23 and Dec. 23,	1,800 00	1892, Dec. 23, \$4,500.
	Amount of City Debt (ordinary).....	\$2,269,200 00		Int. Ordinary City Debt.	\$88,488 32	
	Amount of Water Loans.....	1,185,000 00		Int. Water Loans,	53,630 00	
	Total Amount of City Debt.....	\$3,454,200 00		Total Int. on City Debt,	\$142,118 32	
	Amount of Sinking Funds.....	884,149 57				
	Net City Debt.....	\$2,570,050 43				

* Interest on the same (for the poor).

† Interest on the same (High Street Church).

‡ Interest on the same (for the poor).

DUE FROM THE CITY ON WATER LOAN.

December 31, 1891.

Date of Notes and Bonds.	To Whom Payable.	Amount.	Per Cent.	Security.	Interest, When Due.	Annual Interest.	Notes and Bonds, When Due.
1873, June 14,	Lowell Institution for Savings.....	\$100,000 00	6 $\frac{1}{2}$ %	City's Note,	June 14 and Dec. 14,	\$6,600 00	1893, June 14.
1874, Oct. 14,	City Institution for Savings.....	50,000 00	6 $\frac{1}{2}$	City's Note,	April 14 and Oct. 14,	3,250 00	1894, Oct. 14.
1874, Nov. 12,	Lowell Institution for Savings.....	100,000 00	6 $\frac{1}{2}$	City's Note,	May 12 and Nov. 12,	6,500 00	1894, Nov. 12.
1881, Nov. 1,	Blake Bros. & Co., (15 notes, \$5,000 each)...	75,000 00	4	City's Notes,	May 1 and Nov. 1,	3,000 00	1911, Nov. 1.
1890, Nov. 1,	Sundry Persons (bonds).....	800,000 00	4	Bonds,	May 1 and Nov. 1,	32,000 00	1920, Nov. 1.
*1891, March 9,	Lowell Institution for Savings.....	60,000 00	4	City's Note,	March 9 and Sept. 9,	2,280 00	1892, March 9, \$6,000.†
		\$1,185,000 00				\$53,630 00	

* New Pumping Engine.

† Paid by Water Works.

DEBTS DUE THE CITY.

Taxes of 1887.....	\$218 88	
Taxes of 1888.....	464 55	
Taxes of 1889.....	33,713 71	
Taxes of 1890....	60,813 06	
Taxes of 1891.....	144,604 30	
Sidewalk Assessments.....	8,013 08	
Sewer Assessments.....	3,700 68	
Water Rates, Service Pipes, etc.....	26,458 55	
State Aid.....	14,128 25	
Aid for Indigent Soldiers and Sailors....	4,042 00	
	<hr/>	\$296,157 06

REAL ESTATE OWNED BY THE CITY.

City Hall and Memorial Building.....	\$350,000 00
City Government Building.....	83,000 00
Huntington and Jackson Halls.....	40,000 00
Market House.....	75,500 00
City Scales	750 00
High School-house, on Anne and Kirk Streets.....	60,000 00
Bartlett School-house, on Clark Street.....	18,000 00
Butler School-house, on Gorham Street.....	53,000 00
Colburn School-house, on Lawrence Street.....	20,000 00
Edson School-house, on Highland Street.....	28,000 00
Franklin School-house, on Branch Street	25,000 00
Green School-house, on Merrimack Street.....	105,000 00
Moody School-house, on East Merrimack Street.....	18,000 00
Mann School-house, on Lewis Street.....	25,000 00
Varnum School-house, on Myrtle Street.....	28,320 00
Highland School-house, on Pine Street.....	67,000 00
Pawtucket School-house, on Mammoth Road.....	53,000 00
Primary School-house, on Powell Street, near Liberty Street	8,000 00
Primary School-house, on Powell Street, near Chelms- ford Street.....	4,000 00
Primary School-house, on London Street.....	1,000 00
Primary School-house, on School Street.....	7,500 00
Primary School-house, on Pond Street.....	6,000 00
Primary School-house, on High Street.....	9,000 00
Primary School-house, on Carter Street.....	5,000 00
Primary School-house, on Fayette Street....	3,500 00
Primary School-house, on Cross Street.....	24,000 00
Primary School-house, on Cabot Street	23,500 00
Primary School-house, on West Sixth Street.....	7,000 00
Primary School-house, on River Street.....	8,000 00
Primary School-house, on Ames Street.....	8,000 00
Primary School-house, on Tenth Street.....	9,000 00
Primary School-house, on Favor Street.....	28,000 00
Primary School-house, on Cottage Street.....	4,500 00
Primary School-house, on Charles Street....	20,000 00
Training School-house, on Charles Street.....	30,000 00
Primary School-house, on Cheever Street.....	4,000 00
Primary School-house, on London Street... ..	5,000 00

Amount carried forward......\$1,264,570 00

<i>Amount brought forward</i>	\$1,264,570 00
Primary School-house, on Chapel Street.....	4,000 00
Primary School-house, on Central Street	13,500 00
Primary School-house, on Howard Street.....	5,000 00
Primary School-house, on Worthen Street.....	25,000 00
Primary School-house, on Lyon Street.....	20,000 00
Primary School-house, on Dover Street.....	13,500 00
Primary School-house, on Common Street.....	19,000 00
Primary School-house, on Agawam Street.....	9,000 00
Primary School-house, on Grand Street.....	5,500 00
Primary School-house, on Varnum Avenue.....	850 00
Primary School-house, on Kirk Street.....	18,000 00
Primary School-house, at Middlesex Village.....	2,500 00
Primary School-house, on Weed Street.....	10,500 00
Hose Carriage-house, on Fletcher Street.....	18,000 00
Hose Carriage-house, on Central Street.....	11,000 00
Hose Carriage-house, on Warren Street.....	11,000 00
Engine-house, on Gorham Street.....	15,000 00
Engine-house, on Lincoln Street.....	5,500 00
Engine-house and Ward-room, on Branch Street.....	22,000 00
Engine-house and Ward-room, on Fourth Street.....	15,000 00
Engine-house, on Palmer Street.....	76,000 00
Engine-house and Ward-room, on High Street.....	24,000 00
Engine-house, on Westford Street.....	18,000 00
Chemical Engine-house, on Merrimack Street.....	4,500 00
City Farm and Buildings.....	103,000 00
Land and Buildings on Fletcher Street.....	3,500 00
Land and Buildings on Fletcher, Cross, and Lagrange Streets, and Broadway.....	100,000 00
Public Landing in rear of Market House and Police Stable.....	9,500 00
Lot of land on Chelmsford Street.....	7,000 00
Lot of land on Fletcher and Bowers Streets.....	8,000 00
Lot of land on First Street	190 00
Lot of land on Middle Street.....	14,000 00
Lot of land on Tenth Street.....	5,000 00
Lot of land on Rock Street.....	1,200 00
North Common.....	112,900 00
Engine-house, on Lawrence Street, (unfinished).....	5,835 81
Engine-house, Mammoth Road, (unfinished).....	7,697 95
South Common.....	224,800 00
Mount Vernon Park.....	2,000 00
Belvidere Park.....	10,000 00
Wilson Park.....	1,600 00
Rogers Fort Hill Park.....	75,000 00
	<hr/>
	\$2,222,143 76

WATER WORKS.

The Real Estate and Personal Property belonging to
the City, occupied and used by the Water Works,
net cost to Jan. 1, 1892\$2,413,164 62

BURIAL GROUNDS OWNED BY THE CITY.

No. 1 Burial Ground, on School Street.
No. 2 Burial Ground, on Gorham Street.
Edson Cemetery, on Gorham Street.

REAL AND PERSONAL PROPERTY OWNED BY THE CITY.

Real Estate.....	\$2,072,143 76
Water Works, net cost to Jan. 1, 1892.....	2,413,164 62
Personal Property in care of Superintendent of Schools,	23,000 00
Personal Property in care of Superintendent of Streets, belonging to Streets.....	22,984 99
Personal Property in care of Superintendent of Streets, belonging to Sewers and Drains.....	5,878 83
Personal Property in care of Superintendent of Streets, belonging to Pawtucket Boulevard.....	51 20
Personal Property in care of City Engineer.....	900 00
Personal Property in care of Superintendent of Insti- tutions at City Farm.....	30,793 31
Personal Property at Wood Yard.....	2,827 95
Personal Property at City Dispensary....	2,216 66
Personal Property in care of Secretary of Overseers of the Poor	200 00
Personal Property in care of Chief Engineer of Fire Department	102,000 00
Personal Property in care of Superintendent of Street Lights.....	21,000 00
Personal Property in care of Librarian at City Library,	35,900 00
Personal Property in care of Board of Health.....	8,547 00
Personal Property in care of Sealer of Weights and Measures	250 00
Personal Property in care of Superintendent of Public Buildings, not mentioned below.....	3,000 00
Personal Property in care of Superintendent of Edson Cemetery	92 15
Furniture in Huntington and Jackson Halls.....	2,500 00
Furniture in School-houses.....	15,000 00
Bell on High Street Church.....	500 00
Clock on High Street Church.....	500 00
Personal Property in care of Chief of Police.....	15,138 55
Personal Property in care of City Weigher	225 00
Debts due the City.....	296,157 06
Cash in the Treasury.....	288,718 38
	<hr/>
	\$5,362,789 46

COST OF SEWERS LAID IN 1891.

Andover Street Extension, from the terminus of the sewer formerly laid, westerly and northerly, a distance of 315 feet to the Intercepting Sewer in Warren Street. (Contract). (Begun in 1890)...	\$2,228 61
Auburn Street, from the sewer in Linden Street, westerly, a distance of 302 feet to a point near Gorham Street	381 53
Adams Street, from the sewer in Cabot Street, westerly, a distance of 291 feet	707 44
Broadway, from the terminus of the sewer formerly laid west of Walker Street, westerly, a distance of 183.5 feet to a point near Wilder Street	524 86
Bowers Street, from the sewer in Salem Street, westerly, a distance of 147 feet	227 79
Beaver Street, from Beaver Brook, northerly, to Lakeview Avenue, a distance of 551.5 feet	1,284 54
Bridge Street Outlet, from the terminus of the sewer formerly laid, southerly into Merrimack River, a distance of 57 feet. (Began in 1890)	532 45
City Hall Avenue, from the angle in said avenue, westerly a distance of 455 feet. (Relaid)	2,052 50
Corner Street, from the sewer in South Walker Street, westerly a distance of 164.5 feet	151 40
Common Street, from the sewer in Cross Street, northerly a distance of 851 feet to a point near Clark Street	1,353 03
Exeter Street, from the terminus of the sewer formerly laid, northerly a distance of 225 feet	363 70
Foster Street, from the terminus of the sewer formerly laid, southerly a distance of 345 feet to a point near Pine Street	380 28
Fayette Street, from the terminus of the sewer formerly laid, southerly a distance of 135.5 feet to a point near Chestnut Street. (Contract). (Began 1890).	388 44
Hanover Street, from the sewer in Merrimack Street, westerly a distance of 86.5 feet	144 23
Hanover Street, from the sewer in Merrimack Street, easterly a distance of 179 feet	336 19
<i>Amount carried forward</i>	\$11,056 99

<i>Amount brought forward</i>	\$11,056 99
June Street, from the terminus of the sewer formerly laid, northwesterly a distance of 298.5 feet. (Contract). (Begun 1890).....	379 21
Kinsman Street, from the sewer in Crosby Street, northeasterly a distance of 666.5 feet. (Relaid)..	942 09
Lawrence Street, from the Wamesit Canal, southeasterly a distance of 442 feet to South Whipple Street. (Relaid).....	6,623 84
Lawrence Street, from South Whipple Street, southeasterly a distance of 1,012.5 feet. (Unfinished)..	8,574 37
Lawrence Court, from the sewer in Lawrence Street, westerly a distance of 198.5 feet.....	239 72
Lakeview Avenue, from Beaver Street, westerly to the town line and easterly from Beaver Street to Hovey Street, a total distance of 1,868.5 feet.....	2,544 22
Lakeview Avenue, from the terminus of the sewer formerly laid at Aiken Street, westerly a distance of 305 feet.....	558 31
Linden Street, from the terminus of the sewer formerly laid at Auburn Street, southerly a distance of 108 feet	235 64
Merrimack Street, from the sewer in Merrimack Street, at Tilden Street, northerly a distance of 408.5 feet to Hanover Street. (Contract).....	1,364 35
Manchester Street, from the sewer in Gorham Street, westerly a distance of 495 feet.....	650 97
Mammoth Road, from the terminus of the sewer formerly laid at Fourth Avenue, northerly a distance of 1,485 feet to Eighth Avenue.....	3,819 48
May Street, from the sewer in Twelfth Street, northerly a distance of 421 feet.....	819 00
Mt. Washington Street, from the sewer in Varney Street, northeasterly a distance of 156 feet.....	191 53
Mead Street, from the sewer in Whipple Street, westerly a distance of 269.5 feet.....	553 50
New South Walker Street, from the terminus of the sewer in South Loring Street, at "D" Street, westerly in "D" Street to New South Walker Street and southerly in New South Walker Street to "A" Street, a total distance of 837 feet.....	1,454 69
New "A" Street, from the sewer in Powell Street, easterly a distance of 213 feet.....	234 24
Phillips Street, from the sewer in Broadway, northeasterly a distance of 322 feet.....	687 61
Pine Street, from the sewer in Stevens Street, westerly a distance of 376.5 feet to Highland Avenue.....	1,638 71
<i>Amount carried forward</i>	<u>\$42,568 47</u>

<i>Amount brought forward</i>	\$42,568 47
Rogers Street, from the end of the sewer in Hanks Street, southerly to Rogers Street and in Rogers Street, southeasterly to a point opposite the premises of Peter Sheehan, a total distance of 865 feet,	2,741 93
South Walker Street, from the end of the sewer formerly laid at Corner Street, northerly, a distance of 277 feet to a point near Liberty Street.....	399 09
Tanner Street, from the Intercepting Sewer in St. Hyacinth Street, southwesterly, to Lincoln Street, a distance of 1540 feet.....	14,987 35
Tanner Street, from Lincoln Street to London Street, a distance of 360 feet.....	3,336 26
Ware Street, from the sewer in Sheldon Street, northeasterly, a distance of 509.5 feet.....	1,401 67
Westford Street, from the end of the sewer at Nichols Street, easterly, to Bellevue Street, a distance of 213 feet.....	378 08
West Ninth Street, from the sewer in Hampshire Street, northeasterly, a distance of 415.5 feet to a point near Bridge Street.....	450 26
	<hr/>
	\$66,263 11
Cost of Sewers constructed previous to 1891.	1,574,012 03
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Total cost of Sewers to Jan. 1, 1892.....	<u>\$1,640,275 14</u>

RENTS OF BUILDINGS OWNED BY THE CITY.

From Commonwealth, Armory.	\$1,700 00
County of Middlesex, Police Court Rooms.....	750 00
George R. Wheelock, store in City Hall Building	900 00
Carleton & Hovey, store in City Hall Building,	1,200 00
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	\$4,550 00
	<hr/>

LANDS AND BUILDINGS FOR WHICH THE CITY PAYS RENT.

To Boston & Lowell Railroad Co., for ground rent of Huntington and Jackson Halls.....	\$475 00
Trustees of A. H. Hosford, for rent of rooms of City Library.....	1,200 00
Fred H. Ela, Agent. for rent of Reading Room...	375 00
Irvine Block, for rent of rooms for Board of Health and City Library.....	750 00
Proprietors of Locks and Canals on Merrimack River, for rent of land on Cheever and Aiken Streets.....	41 00
	<hr/>
	\$2,841 00
	<hr/>

DAVID CHASE,
Auditor.

**ACCOUNT OF THE CITY TREASURER AND
COLLECTOR OF TAXES FOR 1891.**

LOWELL, MASS., Jan. 1, 1892.

TO THE HONORABLE, THE CITY COUNCIL :

Gentlemen—I have the honor to submit the following report of the Receipts and Expenses of the City of Lowell for the financial year 1891.

Respectfully submitted,

AUSTIN K. CHADWICK,

City Treasurer and Collector of Taxes.

DR. *City of Lowell, in account with Austin K. Chadwick, City*

For cash paid on account of

Schools	\$200,028	27
School-houses	69,243	66
Streets	130,850	28
Reserved Fund	78,692	22
Paupers	77,955	71
Police	96,092	85
Fire Department	109,282	73
Sewers	77,055	49
Commons	11,785	81
Printing	7,294	73
Lighting	55,876	50
Public Buildings	27,407	83
Pawtucket Boulevard	25,130	08
Library	17,307	86
Health	30,827	28
Water Works	180,250	56
Salaries	26,416	61
Interest	87,033	96
State Aid	14,483	75
State Aid, Indigent Soldiers and Sailors	8,217	00
City Debt	430,800	00
Temporary Loans	325,000	00
City Hall and Memorial Building	183,671	34
National Bank Tax	21,370	99
Sinking Fund for the Reduction of the Ordinary City Debt	57,350	30
New Pumping Engine	51,094	46
Paving	26,311	84
High School Building	38,867	65
Abatement of Taxes	39,965	74
County Tax	45,922	74
State Tax	47,694	29
Extension of Palmer Street	7,274	00
Improvem't of Andover St. Sewer System,	2,458	78
High School Sinking Fund	3,731	10
City Hall and Memorial Building Sinking Fund	16,510	83
Water Loan Sinking Fund	26,000	00
Intercepting Sewer Sinking Fund	5,000	00
Aiken Street Bridge Sinking Fund	16,000	00
Central Bridge Sinking Fund	9,600	00
New Buildings at City Farm Sinking Fund	5,000	00
High Service Sinking Fund	1,800	00
Loan of 1882 Sinking Fund	2,500	00
	<hr/>	<hr/>
		\$2,695,157 24
Cash balance, Jan. 1, 1892		288,718 38
		<hr/>
		\$2,983,875 62

Treasurer and Collector of Taxes, for the Financial Year 1891. CR.

By cash received on account of

Schools	\$40,919	23
School-houses	81,507	91
Streets	23,574	36
Reserved Fund	163,619	29
Paupers	26,519	67
Police	17,738	70
Fire Department	28,311	85
Sewers	57,463	98
Commons	692	00
Lighting	13	36
Public Buildings	33,255	42
Pawtucket Boulevard	25,101	00
Library	16,945	50
Health	3,945	57
Water Works	205,997	20
Interest	10,907	60
State Aid	13,029	00
State Aid, Indigent Soldiers and Sailors,	4,254	00
City Debt	205,000	00
Temporary Loans	325,000	00
City Hall and Memorial Building	255,000	00
National Bank Tax	4,697	58
Sinking Fund for the Reduction of Ordinary City Debt	62,499	70
New Pumping Engine	60,000	00
Paving	25,000	00
High School Building	150,000	00
Taxes of 1888	79	17
Taxes of 1889	30,402	48
Taxes of 1890	93,495	45
Taxes of 1891	906,629	59
High School Sinking Fund	3,731	10
City Hall and Memorial Building Sinking Fund	9,010	83
Water Loan Sinking Fund	10,000	00
	<hr/>	\$2,894,341 54
Cash balance, Jan. 1, 1891		89,534 08
		<hr/>

\$2,983,875 62

CITY OF LOWELL.

IN BOARD OF ALDERMEN, Jan. 19, 1892.

Read and referred to the Joint Committee on Accounts.

Sent down for concurrence.

MICHAEL J. DOWD, *City Clerk*.

IN COMMON COUNCIL, Jan. 19, 1892.

Read and referred in concurrence.

DAVID CHASE, *Clerk*.

REPORT OF THE COMMISSIONERS OF SINK- ING FUNDS FOR THE YEAR 1891.

LOWELL, MASS., Jan. 1, 1892.

TO THE HONORABLE, THE CITY COUNCIL:

Gentlemen—The Commissioners of Sinking Funds of the City of Lowell have the honor to submit the following report of the several Sinking Funds of said city, and of the Hapgood Wright Centennial Trust Fund for the year 1891 :

Full value of all Sinking Funds, Jan. 1,		
1892.....	\$884,149	57
Full value of all Sinking Funds, Jan. 1,		
1891.....	733,231	41
		<hr/>
Increase during 1891.....	\$150,918	16
		<hr/>
Value of Water Loan Sinking Funds,		
Jan. 1, 1892.....	\$82,622	11
Value of Water Loan Sinking Funds,		
Jan. 1, 1891.....	53,873	80
		<hr/>
Increase during 1891.....	\$28,748	31
		<hr/>
Value of all other Sinking Funds, Jan 1,		
1892,....	\$801,527	46
Value of all other Sinking Funds, Jan. 1,		
1891	679,357	61
		<hr/>
Increase during 1891.....	122,169	85
		<hr/>
Total increase as above.....	\$150,918	16
		<hr/>

Value of Hapgood Wright Centennial Trust Fund, Jan. 1, 1892	\$1,950 43	
Value of Hapgood Wright Centennial Trust Fund, Jan. 1, 1891	1,895 64	
	<hr/>	
Increase during 1891.....		<u>\$54 79</u>

One new Sinking Fund has been opened during the year, viz :

High School Sinking Fund, receiving credit of	<u>\$3,731 10</u>
--	-------------------

A statement of the receipts, payments, present value, and list of securities of each Sinking Fund follows:

	<i>Securities.</i>	<i>Cash.</i>	<i>Total.</i>
Water Loan Sinking Fund.			
On hand Jan. 1, 1891.....		\$34,772 23	\$34,772 23
Received during 1891:			
Cash—From City of Lowell, premium on bonds sold..		10,000 00	
Income on bank deposits.....		1,577 54	
Annual appropriation.....		16,000 00	
On hand Jan. 1, 1892.....		\$62,349 77	62,349 77
Increase during 1891.....			\$27,577 54
Securities belonging to this fund:			
Cash deposited in First National Bank, 3¾ per cent..			\$62,349 77
High Service Water Loan Sinking Fund.			
On hand Jan. 1, 1891.....	\$18,532 11	\$569 46	\$19,101 57
Received during 1891:			
Cash—Income on investments.....		805 00	
Income on bank deposits.....		97 88	
Annual appropriation.....		1,800 00	
Securities—Matured and paid.....		2,500 00	
Paid during 1891:	\$18,532 11	\$5,772 34	
Securities—Sold, matured and charged off.....	4,032 11		
	\$14,500 00	\$5,772 34	\$20,272 34
Increase during 1891.....			\$1,170 77
Securities belonging to this fund:			
Town of Beverly bonds, \$1000, 4 per cent.....	\$2,000 00		
City of Providence bonds, \$1000, 5 per cent.....	12,000 00		
Town of Pawtucket bonds, \$500, 5 per cent.....	500 00		\$14,500 00
Cash on deposit First National Bank, 3¾ per cent....			5,772 34
Total.....			\$20,272 34

	<i>Securities.</i>	<i>Cash.</i>	<i>Total.</i>
City Hall and Memorial Building Sinking Fund.			
On hand Jan. 1, 1891.....		\$6,080 83	\$6,080 83
Received during 1891:			
Cash — Premiums and interest on \$255,000 bonds sold,		9,010 83	
Income on bank deposits.....		403 13	
Annual appropriation.....		7,500 00	
		\$22,994 79	22,994 79
Increase during 1891.....			\$16,913 96
Securities belonging to this fund:			
Cash on deposit in First National Bank, $3\frac{3}{4}$ per cent..			\$22,994 79
Aiken Street Sinking Fund.			
On hand Jan. 1, 1891.....	\$164,424 51	\$5,172 12	\$169,596 63
Received during 1891:			
Cash — Income on investments.....		7,422 92	
Income on bank deposits.....		1,489 87	
Annual appropriation.....		16,000 00	
Securities matured and paid.....		30,000 00	
	\$164,424 51	\$60,084 91	
Paid during 1891:			
Cash — City of Lowell, to pay note....		5,000 00	
Securities matured and paid.....	30,000 00		
On hand Jan. 1, 1892....	\$134,424 51	\$55,084 91	189,509 42
Increase during 1891.....			\$19,912 79
Securities belonging to this fund:			
4 City of Cambridge bonds, \$1000, 6 per cent.....	\$4,550 63		
1 City of Cambridge bond, \$1000, 5 per cent.....	1,022 90		
1 City of Keene bond, \$500, 4 per cent.....	525 05		
1 City of Providence bond, \$10,000, 5 per cent.....	12,111 12		
Carried forward.....	\$18,209 70		

	<i>Securities.</i>	<i>Cash.</i>	<i>Total.</i>
<i>Brought forward</i>	\$18,209 70		
1 City of Providence bond, \$1000, 5 per cent.....	1,220 54		
1 Town of Bedford note, \$8000, 7 per cent.....	10,220 00		
3 City of Portland bonds, \$1000, 6 per cent.....	3,610 00		
24 Town of Pawtucket bonds, \$500, 6 per cent.....	13,112 77		
City of Lowell notes, P. M. S., 4 per cent.....	12,500 00		
1 City of Salem bond, \$1000, 5 per cent.....	1,125 80		
1 City of Lynn bond.....	1,129 40		
1 Town of Everett note, \$26,000, 7 per cent.....	28,340 00		
4 Town of Danvers bonds, \$1000, 5 per cent.....	4,571 60		
1 Town of Arlington bond, \$1000, 5 per cent.....	1,082 10		
25 Town of Wayland bonds, \$1000, 5 per cent.....	27,052 50		
2 Town of Wilton bonds, \$500, 6 per cent.....	1,174 10		
1 City of Portsmouth bond, \$1000, 4 per cent.....	1,015 80		
1 City of Portsmouth bond, \$1500, 4 per cent.....	1,523 70		
4 City of Lewiston bonds, \$1000, 5 per cent.....	4,806 00		
3 City of Springfield bonds, \$1000, 6 per cent.....	3,730 50		\$134,424 51
Cash on deposit in First National Bank, 3¾ per cent.			55,084 91
			<u>\$189,509 42</u>

New Buildings at City Farm.			
On hand Jan. 1, 1891.....	\$43,554 87	\$1,849 64	\$45,404 51
Received during 1891:			
Cash — Income on investments.....		2,418 00	
Income on bank deposits.....		559 58	
Annual appropriation.....		5,000 00	
Securities matured and paid		20,000 00	
	\$43,554 87	\$29,827 22	
Paid during 1891:			
Securities matured, paid and charged off.....	20,516 67		
On hand Jan. 1, 1892.....	\$23,038 20	\$29,827 22	52,865 42
Increase during 1891.....			<u>\$7,460 91</u>

	<i>Securities.</i>	<i>Cash.</i>	<i>Total.</i>
Securities belonging to this fund:			
3 City of Lowell I. S. notes, \$1650, 4 per cent.....	\$4,950 00		
1 City of Cambridge bond, \$1000, 6 per cent.....	1,031 80		
12 City of Portland bonds, \$1000, 6 per cent.....	12,970 80		
4 Town of Arlington bonds, \$1000, 6 per cent.....	4,085 60		\$23,038 20
Cash on deposit in First National Bank, 3¾ per cent..			29,827 22
			<u>\$52,865 42</u>
Loan of 1882 Sinking Fund.			
On hand Jan. 1, 1891	\$22,198 60	\$547 92	\$22,746 52
Received during 1891:			
Cash — Income on investments.....		1,200 00	
Income on bank deposits.....		99 78	
Annual appropriation		2,500 00	
Securities matured and paid.....		2,000 00	
	\$22,198 60	\$6,347 70	
Paid during 1891:			
Securities matured, paid and charged off.....	2,002 00		
On hand Jan. 1, 1892.....	\$20,196 60	\$6,347 70	26,544 30
Increase during 1891			\$3,797 78
Securities belonging to this fund:			
2 City of Bangor bonds, \$1000, 7 per cent.....	\$2,122 20		
1 Town of Stoughton bond, \$2000, 4 per cent.....	2,005 80		
1 City of Nashua bond, \$1000, 6 per cent.....	1,031 80		
10 City of Manchester bonds, \$500, 6 per cent.....	5,407 60		
2 City of Manchester bonds, \$1000, 6 per cent.....	2,143 00		
6 City of Chelsea bonds, \$1000, 6 per cent.....	6,424 40		
1 City of Manchester bond, \$1000, 6 per cent.....	1,061 80		20,196 60
Cash on deposit in First National Bank, 3¾ per cent..			6,347 70
			<u>\$26,544 30</u>

	<i>Securities.</i>	<i>Cash.</i>	<i>Total.</i>
Central Bridge Sinking Fund.			
On hand Jan. 1, 1891	\$53,500 00	\$34,217 00	\$87,717 00
Received during 1891:			
Cash — Income on investments.....		2,140 00	
Income on bank deposits.....		1,383 30	
Annual appropriation.....		9,600 00	
Securities matured and paid.....		5,000 00	
	\$53,500 00	\$52,340 30	
Paid during 1891:			
Securities matured and paid.....	5,000 00		
On hand Jan. 1, 1892.....	\$48,500 00	\$52,340 30	100,840 30
Increase during 1891..			\$13,123 30
Securities belonging to this fund:			
3 City of Lowell P. M. S. notes, \$1000, 4 per cent.....	\$3,000 00		
1 City of Lowell P. M. S. note, \$500, 4 per cent.....	500 00		
1 City of Lowell note, 4 per cent.....	45,000 00		\$48,500 00
Cash on deposit in First National Bank, 3¾ per cent..			52,340 30
			\$100,840 30
Intercepting Sewer Sinking Fund.			
On hand Jan. 1, 1891.....	\$44,068 90	\$1,398 08	\$45,466 98
Received during 1891:			
Cash — Income on investments.....		1,918 00	
Income on bank deposits.....		179 02	
Annual appropriation.....		5,000 00	
Securities matured and paid.....		1,650 00	
	\$44,068 90	\$10,145 10	
Paid during 1891:			
Securities matured, paid and charged off.....	6,368 90		
On hand Jan. 1, 1892.....	\$37,700 00	\$10,145 10	47,845 10
Increase during 1891.....			\$2,378 12

	<i>Securities.</i>	<i>Cash.</i>	<i>Total.</i>
Securities belonging to this fund:			
4 City of Lowell P. M. S., \$1000, 4 per cent.....	\$4,000 00		
3 City of Providence bonds, \$10,000, 5 per cent.....	30,000 00		
3 City of Providence bonds, \$1000, 5 per cent.....	3,000 00		
1 State of New Hampshire bond, \$500, 6 per cent.....	500 00		
1 City of Dover bond, \$200, 6 per cent.....	200 00		\$37,700 00
Cash on deposit in First National Bank.....			10,145 10
			<u>\$47,845 10</u>

High School Sinking Fund.			
On hand Jan. 1, 1891.....	\$0 00	\$0 00	
Received during 1891:			
Cash — Premiums on bonds sold.....		3,731 10	
Income on bank deposit.....		31 47	
On hand Jan. 1, 1892.....		\$3,762 57	\$3,762 57
Increase during 1891.....			<u>\$3,762 57</u>
Securities belonging to this fund:			
Cash deposited in First National Bank, 3¾ per cent..			\$3,762 57

Ordinary City Debt Sinking Fund.			
On hand Jan. 1, 1891.....	\$278,512 91	\$23,832 23	\$302,345 14
Received during 1891:			
Cash — Income on investments.....		13,145 50	
Income on bank deposits.....		1,888 52	
Securities matured and paid....		103,950 00	
Corporation and National Bank taxes.....		57,299 31	
Securities bought.....	195,000 00		
	<u>\$473,512 91</u>	<u>\$200,115 56</u>	
<i>Carried forward</i>	\$473,512 91	\$200,115 56	\$302,345 14

	<i>Securities.</i>	<i>Cash.</i>	<i>Total.</i>
<i>Brought forward</i>	\$473,512 91	\$200,115 56	\$302,345 14
Paid during 1891:			
Cash for securities.....		195,000 00	
Securities matured, paid and charged off.....	121,462 91		
On hand Jan. 1, 1892.....	\$352,050 00	\$5,115 56	357,165 56
Increase during 1891.....			\$54,820 42
Securities belonging to this fund:			
24 City of Lawrence bonds, \$1000, 6 per cent.....	\$24,000 00		
1 City of Keene bond, \$500, 4 per cent.....	500 00		
2 Town of Arlington bonds, \$1000, 5 per cent.	2,000 00		
9 State of New Hampshire bonds, \$100, 6 per cent....	900 00		
7 City of Providence bonds, \$1000, 5 per cent.....	7,000 00		
1 State of Rhode Island bond, \$3000, 6 per cent....	3,000 00		
3 City of Newton bonds, \$1000, 5 per cent.....	3,000 00		
3 City of Newburyport bonds, \$1000, 4 per cent....	3,000 00		
17 Town of Pawtucket bonds, \$500, 5 per cent.	8,500 00		
2 City of Springfield bonds, \$1000, 6 per cent.....	2,000 00		
2 City of Portsmouth bonds, \$1000, 6 per cent.	2,000 00		
2 City of Fall River bonds, \$1000, 6 per cent.....	2,000 00		
1 City of Somerville bond, \$1000, 5 per cent.....	1,000 00		
1 City of Lawrence bond, \$5000, 6 per cent.....	5,000 00		
7 City of Lawrence bonds, \$1000, 6 per cent.	7,000 00		
37 City of Bangor bonds, \$1000, 6 per cent.....	37,000 00		
4 City of Bangor bonds, \$500, 6 per cent.	2,000 00		
1 City of Keene bond, \$1000, 6 per cent.....	1,000 00		
1 City of Lynn bond, \$1000, 6 per cent.....	1,000 00		
Hamilton Mfg. Co. note, 6 months, 4¾ per cent. . . .	75,000 00		
City of Lowell note \$15,000, 3½ per cent, $\frac{1}{10}$ paid..	6,000 00		
City of Lowell note, \$35,000, 3½ per cent, $\frac{1}{10}$ paid.....	14,000 00		
City of Lowell note, \$50,000, 4½ per cent, $\frac{1}{10}$ paid.....	30,000 00		
7 City of Lowell notes, \$7950, 4 per cent..	55,650 00		
2 City of Lowell P. M. S. notes, \$1000, 4 per cent.....	2,000 00		
<i>Carried forward</i>	\$294,550 00		

	<i>Securities.</i>	<i>Cash.</i>	<i>Total.</i>
<i>Brought forward</i>	\$294,550 00		
1 City of Lowell P. M. S. note, \$500, 4 per cent.....	500 00		
City of Lowell note, \$20,000, 3½ per cent, $\frac{6}{16}$ paid.....	8,000 00		
City of Lowell note, \$10,000, 4½ per cent, $\frac{8}{16}$ paid.....	2,000 00		
City of Lowell note, \$10,000, 4½ per cent, $\frac{8}{16}$ paid.....	2,000 00		
City of Lowell note, \$45,000, 4 per cent.....	45,000 00		\$352,050 00
Cash deposited in First National Bank, 3¾ per cent..			4,902 86
Cash deposited in Mechanics Savings Bank, 4 per cent,			212 70
			<u>\$357,165 56</u>
 Hapgood Wright Centennial Trust Fund.			
On hand Jan. 1, 1891.....		\$1,895 64	\$1,895 64
Received during 1891:			
Cash— Income on bank deposits.....		54 79	
On hand Jan. 1, 1892.....		\$1,950 43	1,950 43
Increase during 1891.....			<u>\$54 79</u>

Respectfully submitted,

J. C. ABBOTT,
HENRY G. CUSHING,
A. M. CHADWICK,

*Commissioners of Sinking Funds
of the City of Lowell, for the year 1891.*

**REPORT OF JOINT STANDING COMMITTEE
ON ACCOUNTS, ON THE ACCOUNT OF
THE TREASURER, ETC.**

LOWELL, MASS., April 12, 1892.

TO THE CITY COUNCIL:

The Joint Committee on Accounts of the City Council of the City of Lowell, to whom was referred the accounts of the City Treasurer and of the Commissioners of the Sinking Funds, for the financial year ending Dec. 31, 1891, have attended to the business committed to them.

The Joint Standing Committee on Accounts of the City Council of the City of Lowell, for the year 1892, have made with the assistance of Mr. Clarence W. Whidden, expert accountant of Lowell, a thorough examination of the accounts of the City Treasurer and of the Commissioners of Sinking Funds for the financial year ending Dec. 31, 1891, and find them to be correct. We herewith submit the report of Mr. Whidden, the accountant, all of which is respectfully submitted.

J. W. CASSIDY,
WM. J. COUGHLIN,
FRED. HORNE,

*Joint Standing Committee on Accounts of the City Council of the
City of Lowell, for the year 1892.*

REPORT OF ACCOUNTANT.

LOWELL, MASS., April 5, 1892.

TO JAMES W. CASSIDY, ESQ., Chairman of Committee on Accounts
for the City of Lowell:

Dear Sir—In obedience to your request to audit the Books and Accounts of the City Treasurer, for the year ending Dec. 31, 1891, I desire to state that I have made a thorough examination, and submit the following statements:

CASH BOOK.

Cash balance, Jan. 1, 1891	\$89,534 08
Amount received during the year	2,894,341 54
Amount	<u>\$2,983,875 62</u>
Disbursements during the year	\$2,695,157 24
Cash balance, Dec. 31, 1891	288,718 38
Amount	<u>\$2,983,875 62</u>

The receipts for Taxes and Water Rates are correctly cast and carried from the books of original entry to the cash book accurately.

The disbursements are properly approved and vouched.

VERIFICATION OF CASH BALANCE.

Cash on hand, Dec. 31, 1891	\$288,718 38
Total receipts from Jan. 1, 1892 to March 21	220,548 42
Amount	<u>509,266 80</u>
Total payments from Jan. 1, 1892 to March 21	396,541 52
Balance	<u>\$112,725 28</u>

Cash at the treasurer's office	\$6,171 32	
Deposit in the Lowell Trust Company	\$117,888 18	
Less checks outstanding.....	11,334 22	106,553 96
		<u>\$112,725 28</u>

The deposit in the Lowell Trust Company was certified by George M. Harrigan, Actuary.

JOURNAL AND LEDGER.

The Journal entries are properly made and correctly posted to the Ledger, and I find the Ledger Accounts and Balances accurate, and prove the Treasurer's statement.

TAXES.

Uncollected Taxes, Jan. 1, 1891 :

Assessment of 1887	\$11,528 26	
" " 1888	14,160 02	
" " 1889	64,187 51	
" " 1890	155,033 34	
	<u>\$244,909 13</u>	
Total Tax Levy of 1891,.....	1,057,638 66	
		<u>\$1,302,547 79</u>

Abatements in 1891 :

Assessment of 1887	\$11,309 38	
" " 1888	13,616 30	
" " 1889	71 32	
" " 1890	724 83	
" " 1891	6,404 77	
	<u>\$32,126 60</u>	

Collected by the Treasurer in 1891 :

Assessment of 1887	\$ 00	
" " 1888	79 17	
" " 1889	30,402 48	
" " 1890	93,495 45	
" " 1891	906,629 59	
	<u>1,030,606 69</u>	

Uncollected Dec. 31, 1891 :

Assessment of 1887	\$218 88	
" " 1888	464 55	
" " 1889	33,713 71	
" " 1890	60,813 06	
" " 1891	144,604 30	
	<u>239,814 50</u>	
		<u>\$1,302,547 79</u>

The amounts uncollected I have verified by a trial balance taken from the Ward books of each year.

WATER RATES.

Balance due, Jan. 1, 1891		\$20,919 66
Total charges for 1891		216,263 00
Amount		<u>\$237,182 66</u>
Amount collected by the Treasurer in 1891 . . .	\$206,097 20	
Abatements in 1891	4,606 41	
	<u> </u>	<u>\$210,703 61</u>
Balance		<u>\$26,479 05</u>
Transfer account as shown by the books at the Water Works Office	\$26,458 55	
Clerical error in Transfer Account	20 50	
	<u> </u>	<u>\$26,479 05</u>

I have verified the cash transactions of the Treasurer with the several departments and found them in each case correct, for example: the amount credited on the Treasurer's books as having been received by him from the Superintendent of City Scales, was \$487.48, which exactly agrees with the Treasurer's receipts as shown to me by Richard J. Noonan, Superintendent.

SINKING FUNDS.

The Report of the Commissioners was handed me for examination. I found that the securities listed by them as belonging to the several funds were in their possession, and that the full income and appropriations have been properly entered on the books of their Treasurer.

The cash balance of each fund being a deposit in the First National Bank, was certified by John F. Sawyer, Cashier.

The "Hapgood Wright Centennial Trust Fund" now amounts to \$1,950.43.

I desire to commend the efficiency and accuracy of the Treasurer, also the faithfulness of his assistants.

Very respectfully yours,

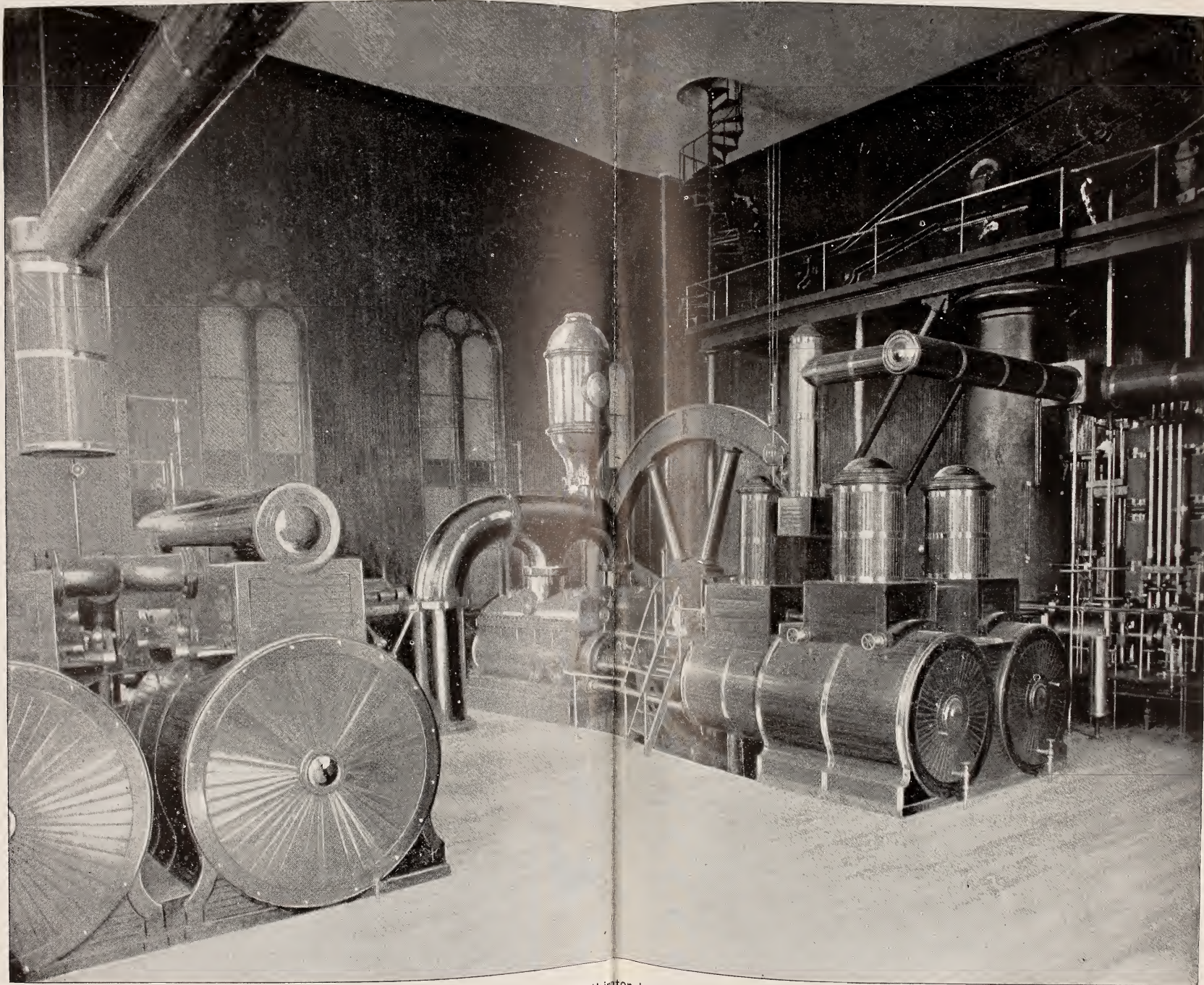
CLARENCE W. WHIDDEN,

Accountant.

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Worthington High Duty—10,000,000 Gallons.

Worthington Low Duty—5,000,000 Gallons.

Morris—5,000,000 Gallons.

Engine Room at Pumping Station==Lowell, Mass.



NINETEENTH

ANNUAL REPORT

OF THE

LOWELL WATER BOARD,

TO THE

CITY COUNCIL OF THE CITY OF LOWELL, MASS.,

AND THE

REPORTS OF THE SUPERINTENDENT OF WATER WORKS AND
OF THE CITY ENGINEER TO THE WATER
BOARD FOR 1891.



LOWELL, MASS.:
HARRINGTON BROS., PRINTERS,
1892.

CITY OF LOWELL.

IN COMMON COUNCIL, Jan. 12, 1892.

Received and ordered on file: sent up for concurrence.

DAVID CHASE, *Clerk.*

IN BOARD OF ALDERMEN, Jan. 19, 1892.

Received and ordered on file, in concurrence.

MICHAEL J. DOWD, *City Clerk.*

WATER DEPARTMENT, 1891.

WATER BOARD.

MILES F. BRENNAN, *Prest.*, term expires second Monday in March, 1895.

ARTHUR F. SALMON, term expires second Monday in March, 1893.

EDWARD W. THOMAS, term expires second Monday in March, 1894.

JOHN STOTT, term expires second Monday in March, 1892.

RICHARD B. ALLEN, term expires first Monday in January, 1892.

CHARLES L. KNAPP, *Secretary and Clerk.*

SAMUEL P. GRIFFIN, *Superintendent.*

THOMAS F. DOYLE, *Foreman.*

ANTHONY F. COGER, *Services.*

WILLIAM JOYCE, *Asst. Foreman.*

WALTER P. WILEY, *Meter Repairs.*

LEONARD T. FARRIS, *Service Clerk.*

MARY G. SAWYER, *Book-keeper.*

JAMES P. ROBERTS, *Engineer.*

THOS. MCLOUGHLIN, *Asst. Engineer.*

Inspectors.

JOHN J. BANCROFT,

GEORGE E. WORTHEN,

ROBERT GARDNER, JR.,

MICHAEL H. MCCUE.

FRANK LAPOINT, *Reservoir.*

REPORT OF THE WATER BOARD.

OFFICE OF LOWELL WATER BOARD,

LOWELL, Jan. 11, 1892.

*To the Honorable the City Council of the City of
Lowell:*

The Lowell Water Board herewith submits its Annual Report, the same being for the year 1891, and the nineteenth annual report of the Department's work.

Accompanying the report are the sub-reports of the City Engineer and the Superintendent of Water Works, together with the Secretary of Board's financial statement of the year. In these reports is comprehended the entire work of the year.

ORGANIZATION.

The Water Board of 1891, consisting of Miles F. Brennan, John Stott, Arthur F. Salmon, Edward W. Thomas and Alderman Richard B. Allen, met for organization March 9th, 1891, when Miles E. Brennan was chosen President of the Board.

At a meeting held March 23rd, Samuel P. Griffin was elected Superintendent of Water Works.

At a meeting held June 12th, Charles L. Knapp was re-elected Clerk and Secretary of the Board.

VOLUME OF BUSINESS OF YEAR.

The total charges of the year were \$216,263.00, of which \$202,458.63 was for water. The total charges show an increase of \$12,407.73 over the total charges of 1890.

The total expenditures, including \$54,270.00 interest payments, were \$180,250.56. Exclusive of interest, the expenditures, amounting to \$125,980.56, are the largest of any year since 1875. The net receipts on account of Water Works were \$205,997.20, leaving with the balance of \$811.89 from 1890, a balance of \$26,558.53 to credit of Water Works January 1, 1892.

The above, it will be understood, do not include expenditures properly charged to New Pumping Engine Appropriation (\$60,000, loan of 1890), which embrace contract payments to H. R. Worthington of New York, cost of new boilers, engine foundation, together with necessary changes to engine building and boiler house. Elsewhere will be found in detail a statement of such expenditures, amounting to \$51,094.46, and leaving January 1, 1892, a balance of \$8,905.54 to the credit of New Pumping Engine Appropriation.

THE WORK OF THE YEAR.

The cost of conduit, the description of laying of which is found in the Superintendent's report, was \$28,655.93, a figure within the estimates of the City Engineer. The work was of a heavy character and of a nature that would of necessity have compelled many water works equipments to have sought contractors' assistance. The Lowell Water Works, however, undertook the work with their own well disciplined workmen and carried the same to successful completion.

The conduit system as now, consists, commencing at the Bodwell Gate House or end of tunnel, of one 30-inch pipe, running with a considerable fall to and under Beaver Brook. From the easterly bank of the brook the duplicating commences, the two parallel 30-inch pipes ascending until reaching the Pumping Station where they discharge into the wells. It will be understood that formerly the single pipe, east of the brook with its considerable rise, would not accommodate the full capacity of the section of the conduit between the tunnel and the brook with its very considerable fall; while as now, the single line of 30-inch pipe west of the brook undertakes to supply the two lines of pipe extending east of brook and to Pumping Station. By approximate measurement it is found that the daily discharge capacity to wells, by the duplication of

pipes as described, has been increased from 9,000,000 gallons to 11,500,000 gallons. The original idea when paralleling of the conduit was first considered was to carry the work its entire length, from Bodwell Gate House to the pump wells, but as will be seen, the very considerable expense of crossing the brook, together with laying from the brook to the tunnel is deferred some years at least; meanwhile, ample well supply being provided.

NEW SHOPS, STABLE AND SHEDS.

A description of buildings proposed to be erected during 1891 at the Pumping Station, was detailed in the report of one year ago. These buildings as there described, designed for shop purposes and stable uses, are completed. The shop is equipped for machinists' repairs, plumbing and piping work and is a model in its completeness.

The stable is roomy and well suited for its purpose. The total cost of new buildings was \$16,706.64, given in detail elsewhere. By the arrangement the Superintendent's headquarters are established at the shop. Here under his eye, is everything connected with the outside work of the department; here, too, are all supplies save the heavy pipe carried in stock, which continues to be stored at the yard on Broadway. The Water Board believes that the steps taken, will bring good results in the form of increased efficiency and more economic conduct of the general outside work.

They believe, too, basing that belief upon observations, that under the present arrangement and with the facilities at hand, no city is possessed of a more complete water works plant than has the City of Lowell.

A goodly portion of the labors by the Board during the year have been in the direction of effecting by some means an improvement of the city water, either improvement in the quality of the present supply, or by obtaining a new source. This problem is fraught with perplexities. The success that has attended driven well supplies in numerous cities, notably several New England supplies, has led the Board to a careful investigation of this manner of providing water. The Board have at the present time propositions from several concerns, offering to build well systems of from 5,000,000 to 10,000,000 gallons capacity, at varying prices. The two main points to be considered and determined before expending money in this direction, are vital, namely: First—quality. Second—quantity. While experiments thus far have been quite thorough, the questions of quality and quantity are not yet satisfactorily settled. City Engineer Bowers, in whom the Lowell Water Board have found an earnest and tireless worker, and from whom they have received most valuable assistance during their investigations, in his own report details clearly why the questions of quality and quantity are unsettled,

although it must be said results obtained are not wholly discouraging.

Gentlemen connected with the Massachusetts State Board of Health express satisfaction at Lowell's effort's to abandon Merrimack river and obtain underground water, although the theories of the State Board's officials are not wholly supported by the results of our experiments. The Water Board has officially requested the co-operation of the State Board of Health in the matter of bettering Lowell's water supply, and we do not doubt but that very soon we shall be possessed of knowledge that will guarantee some movement that will result in giving Lowell an improved water supply. Be assured that the Water Board will take no steps in darkness and uncertainty, feeling assured that our people will be reasonably patient, and that as a whole they are possessed with rare sense which will lead them to discount much that is unwisely said and written against the water of Merrimack River, for precisely what it is worth.

Whatever may be the good opinions of the quality of city water for drinking as it is today, it must be admitted that there is a constant deterioration from year to year, more apparent under certain existing conditions of the river, perhaps, but nevertheless a steady decline in quality. This being the case, if there is a better quality of water obtainable, let us have it. Certainly every

citizen will endorse that sentiment. Is there such a water, in sufficient quantity, obtainable? That is the question the Water Board is trying to answer and it will be the chief topic for discussion during the coming year.

THE COMING YEAR.

The work of the coming year will be important. As said, the subject of improving the quality of city water will be further considered. A new 30-inch force main will be laid from the Pumping Station to the Reservoir, paralleling the present 24-inch pipe. The cost, it is estimated, will be \$25,000. The mains in several streets will be replaced by larger-sized pipe than at present, notably Middle Street, where recent building operations have entirely changed the needs of the locality. The Water Board has voted to set no more sidewalk flush hydrants. Their only recommendation is that they are out of the way of passers, a virtue hardly compensating for what is lost by non-use of the modern post hydrant.

Our new shop facilities will lead to a thorough overhauling of the old meters in use, following which the income to the city for metered water will be materially increased.

The completion of the new Worthington engine, if it shall be accepted by the city, will as a matter of course, relieve the Morris and the low-duty Worthington engine. It is not unlikely that

the Morris engine will be entirely overhauled. Its tremendous service performed in past time is more than likely to show upon close examination, portions of the engine that must be renewed. Whatever the future of this noble engine, its past is a matter of record, establishing it one of the most remarkable engines of its day.

The new Worthington engine is practically completed, the finishing touches are now being made and within a few days your honorable body will be invited to witness its work. As regards the fulfillment of requirements, the city's interest will be looked after by George H. Barrus, M. E., of Boston. As you know, the amount appropriated for new engine, boilers, foundations and necessary changes was \$60,000.00, the same to be paid in ten equal annual payments from the receipts of the Water Works. It may be said here, that the amount appropriated will be but slightly exceeded. As has been stated, the amount expended to date, detail of which is given elsewhere, is \$51,094.46, leaving a balance to credit of New Pumping Engine account, amounting to \$8,905.54 to meet the final payment due H. R. Worthington, said payment by terms of contract to be paid "within sixty days after the said Engineer shall have certified to said Water Board that the prescribed duty test has been made, and that all the work embraced in this agreement has been com-

pleted in accordance with the conditions of the same."

The slight deficiency will be met by the Water department by payment in regular form. It should be noticed, however, that the excess over appropriation, trifling though it is, is accounted for by the fact that each and every item in any way resulting from the placement of the new engine is charged up to the New Engine account. For instance, a very considerable expense was entailed by being obliged to pipe for the discharge of the new engine into the present force main, while properly chargeable to New Engine account this year, a very considerable part of the same will, in 1892 become a part of the new force main, a separate account, and one to be met by the regular monthly payments of the Water Works. So, too, is the New Engine account charged up with considerable that shows as changes in the engine room, which done at any other time, would naturally go to general maintenance account, but happening as it has, a result of the changes made in the room to accommodate the new engine, it has been charged as it would be in private business to New Engine account.

It will be noticed that the income of the department is now in the neighborhood of \$210,000, and constantly increasing; that the ordinary running expense of the department, including interest is

\$135,000. This shows a very considerable surplus of yearly earnings, practically \$75,000.

It is for your honorable body to meet the situation. Presuming that your views are such that you would have the Water Works self-sustaining only, it would be proper to make a reduction in the schedule of charges as specified by ordinance in such direction as you shall see fit. Our only solicitude is that your honorable body give the subject the most careful consideration before action.

There is a matter of finance of the future that is proper to call your attention at this time and in connection with the subject of reducing the annual income of the Water department.

Of the old Water Loan, there now remains unpaid \$250,000 in the form of notes, the last of which matures Nov. 12, 1894.

To meet this indebtedness there is available a sinking fund balance of \$9,073.37, and \$200,000 in the refunding Water Loan 30-year 4 per cent. bonds, not yet sold; in all \$209,073.37, leaving a balance of \$40,926.63 for the redemption of which no provision has yet been made, and for which provision must be made within the next three years.

Whether it would be wiser to continue the water rates as at present and apply the excess of revenue to that purpose, or to reduce the water rates and raise this item by direct assessment, in

the annual tax levy, is for your honorable body to consider.

We have stated that the heavy pipe of the department, of necessity carried in stock, continues to be stored at the Pipe Yard on Broadway. It may be said that this is the only use the Water Works department will make of these premises, thus placing at the disposal of the city considerable land and store-house space. Furthermore, if the Water Board succeeds in carrying out plans now in hand, the Broadway premises will be vacated entirely and permanently, as it is the purpose of the Board to lease sufficient land on line of railroad to accommodate the storage of heavy pipe, thus saving one handling of the pipe, and a very considerable item of labor and attending expense. If this can be brought about, the entire Broadway property will revert to the city's disposal, and may be used for other than Water Works purposes.

MILES F. BRENNAN,
JOHN STOTT,
ARTHUR F. SALMON,
EDWARD W. THOMAS.
RICHARD B ALLEN.

LOWELL WATER WORKS OFFICE,

LOWELL, MASS., Jan. 1, 1892.

Lowell Water Board:

GENTLEMEN,—I have the honor to submit a financial statement of the business done by the Lowell Water Works for the year ending December 31st, 1891, the same showing charges, collections and expenditures for the period named. The Statement is arranged in tables and comprehends the financial details of every branch of the department work, all of which is respectfully submitted.

CHARLES L. KNAPP,

Clerk Lowell Water Board.

Financial Statement.—Lowell Water Works.

CHARGES.						RECEIPTS.					
	Sundries.	New Service Pipe.	Water ; Rates.	Water ; Meter.	Total Charges 1891.	Comparison Charges. 1890.	Received by Treasurer, by Accounts.	Abate-ments by Accounts.	Shut-off, Unpaid and Awaiting Investiga-tion.	Net Receipts by Months.	Comparison. Net Receipts, 1890.
1890.											
Transfer.	.....	.....	.....	.....	\$20,919 66	\$ 16,397 55	\$19,588 26	\$ 834 45	\$ 496 95	.....	.....
January.....	\$ 421 82	\$ 6 75	\$ 159 53	\$ 414 00	1,002 10	931 34	956 96	6 54	38 60	\$ 9,694 81	\$ 6,725 11
February.....	74 41	16 30	281 73	355 80	728 24	555 14	725 31	50	2 43	5,320 10	4,131 42
March.....	348 68	24 37	105,177 60	16,984 79	122,535 44	123,084 54	119,194 56	2,919 41	421 47	1,538 09	2,705 01
April.....	2,072 09	178 57	988 47	385 95	3,625 08	2,848 77	3,438 75	84 15	102 18	7,640 70	4,365 42
May.....	1,488 18	241 78	2,591 97	493 43	4,815 36	4,357 25	4,567 92	130 34	117 10	42,464 50	43,991 38
June.....	1,102 58	186 20	1,431 97	29,561 27	32,282 02	24,996 83	31,609 00	228 15	444 87	23,390 60	38,220 31
July.....	553 14	139 53	965 04	518 40	2,176 11	2,561 29	2,032 59	93 63	49 89	29,467 38	23,477 21
August.....	947 28	477 18	442 76	1,051 84	2,919 06	2,280 41	2,617 54	62 87	238 65	19,667 24	27,573 88
September.....	1,934 93	137 61	888 54	19,187 43	22,148 51	21,866 10	17, 896 10	198 04	4,054 37	8,662 13	18,933 52
October.....	714 93	293 02	511 89	427 65	1,947 49	2,262 44	1,499 31	38 15	410 03	30,987 62	8,737 12
November	1,371 45	257 49	550 00	429 58	2,608 52	2,500 08	1,024 98	10 18	1,573 36	13,489 09	7,487 97
December.....	676 83	139 25	807 30	17,851 69	19,475 07	15,611 08	885 14	....	18,589 93	13,674 94	7,615 45
Total.....	\$11,706 32	\$2,098 05	\$114,796 80	\$87,661 83	\$237,182 66	\$220,252 82	\$206,036 42	\$4,606 41	\$26,539 83	\$205,997 20	\$193,963 80

Financial Statement.—Lowell Water Works, 1891.

TOTAL OUTGO.

	Pay Rolls and Salaries.	Supplies.	Interest.	Refunds and Vacan- cies.	River, Well and Fil- tration Work.	New Buildings	Re- charged.	Pumping Station.	Stable Expense.	General Expense.	1891. Total Expen- diture.	1890. Total Expen- diture.
January,	\$ 2,824 95	\$ 1,565 89	\$ 180 00	\$ 18 74	.....	.....	\$ 538 39	\$ 3,882 27	\$ 108 10	\$ 197 94	\$ 9,316 28	\$ 6,651 57
February,	1,842 41	585 40	210 00	2 91	.....	.....	286 84	115 13	12 00	122 74	3,177 43	5,966 76
March,	1,813 03	1,745 92	90 00	18 04	.....	.....	.....	1,550 14	154 81	135 30	5,507 24	6,401 44
April,	2,365 72	1,653 07	1,625 00	1,137 34	\$1,272 50	.....	21 17	130 00	63 39	156 20	8,424 39	8,191 48
May,	3,533 58	3,447 93	22,610 00	155 35	15	\$ 18 70	13 72	2,390 95	139 05	114 36	32,423 79	23,413 49
June,	3,201 64	6,301 31	3,500 00	82 21	112 25	15	34 95	796 96	354 60	113 24	14,497 31	18,278 89
July,	5,192 39	12,554 34	.....	49 04	36 47	5,070 93	15 03	2,797 69	109 28	83 92	25,909 09	10,569 68
August,	6,470 00	7,812 50	240 00	37 81	7 00	4,016 87	715 82	1,535 40	124 64	55 75	21,015 79	33,042 23
September,	4,327 35	2,330 35	1,200 00	66 51	935 23	1,577 00	434 32	806 08	87 85	82 36	11,847 05	5,832 12
October,	3,518 55	950 10	1,625 00	115 50	500 42	3,205 86	124 10	82 73	96 86	87 09	10,306 21	9,761 16
November,	2,805 55	1,564 66	19,650 00	98 63	106 15	139 13	286 16	290 13	98 03	84 86	25,123 30	58,679 25
December,	2,286 22	2,553 05	3,340 00	14 02	51 75	2,530 13	1 80	1,808 57	76 11	41 03	12,702 68	7,320 25
Total,	\$ 40,181 39	\$43,064 52	\$54,270 00	\$1,796 10	\$3,021 92	\$16,558 77	\$2,472 30	\$16,186 05	\$1,424 72	\$1,274 79	\$180,250 56	\$194,108 32

Financial Statement.—Lowell Water Works, 1891.

 VERIFICATION OF FOREGOING BY 1891 WATER WORKS ACCOUNT
 AS PER CITY AUDITOR.

Balance undrawn January 1, 1891,	\$ 811 89	
	<hr/>	\$811 89
Received into the Treasury, on account of Water Works:—		
From sundry persons, 1888 account,	\$ 9 55	
“ “ “ 1889 “	63 05	
“ “ “ 1890 “	21,258 71	
“ “ “ 1891 “	184,665 89	
	<hr/>	\$205,997 20
		<hr/>
		206,809 09
Total expenditures in 1891,		180,250 56
		<hr/>
Balance undrawn January 1, 1892,		\$26,558 53

Financial Statement.—Lowell Water Works, 1891.

SUBDIVISION CASH PAID FOR LABOR.

	Setting Meters.	Meter Repairs.	Office and Inspec- tors.	Con- struction.	Pumping Station.	Reservoir	New Services.	Relaid Services.	Conduit.	New Build- ings.	Wells, Filtration and River Work.	Mainten- ance.	Re- charged.
Jan.	\$178 00	\$ 73 50	\$ 869 33	\$ 207 52	\$ 569 13	\$ 69 06	\$ 56 40	\$ 52 90	.....	.....	.....	\$ 582 45	.....
Feb.	115 87	42 80	611 03	55 30	416 46	46 04	88 45	.....	.....	.....	.....	299 78	.....
March,	93 00	87 25	601 78	.....	375 59	46 04	52 60	76 85	.....	.....	.....	313 26	.....
April,	94 37	31 87	559 82	145 18	398 28	50 29	162 60	235 85	.....	.....	.....	520 80	.....
May,	27 49	92 37	710 16	571 37	467 30	57 55	214 95	306 62	\$ 60 25	.....	.....	810 72	\$ 48 12
June,	22 49	78 61	554 32	465 49	385 21	47 41	148 20	220 87	648 07	\$ 25 24	.....	434 57	4 50
July,	20 00	40 00	554 32	140 65	419 34	46 04	144 40	139 65	3,037 37	.....	.....	371 57	112 39
Aug.	22 50	99 25	692 90	561 16	515 80	57 55	123 55	594 70	3,139 79	.....	.....	461 12	35 00
Sept.	25 00	78 37	554 32	369 50	439 02	48 74	184 25	244 20	1,629 93	.....	\$ 40 87	433 31	113 18
Oct.	12 49	127 67	692 90	201 23	534 98	57 55	276 47	332 10	14 64	68 50	23 75	841 86	167 75
Nov.	5 00	47 63	554 32	263 42	447 84	46 04	185 80	211 20	.....	54 13	74 88	534 77	213 84
Dec.	17 50	75 11	415 74	445 86	342 62	34 53	94 25	104 25	.....	.....	17 75	494 70	77 25
Total	\$633 71	\$874 43	\$7,370 94	\$3,426 68	\$5,311 57	\$ 606 84	\$ 1,731 92	\$2,519 19	\$ 8,530 05	\$147 87	\$157 25	\$6,098 91	\$772 03

FURTHER SUBDIVISION OF CHARGES FROM TABLE NO. 1.

	Meters Sold; Fixtures and and Expense of Setting.	Lime Charges.	Shut-off Fines.	Flushing Sewers.	New Services with Material and Labor.	Relaid Services with Material and Labor.	Material and Labor.	To New Engine Loan.	Recharged for Freight, etc.
January.....	\$ 249 02	\$ 4 08	\$ 2 00	\$ 28 00	\$ 6 75	\$ 3 75	\$ 169 06	.....	.....
February.....	30 75	146 88	2 00	12 00	16 30	.....	43 66	.....	.....
March.....	216 05	12 28	4 00	12 00	24 37	39 02	93 61	.....	.....
April.....	898 86	28 32	.....	20 00	178 57	100 44	84 11	\$ 979 68	.....
May.....	742 81	21 64	2 00	12 00	241 78	493 12	227 58	3 50	\$ 21 17
June.....	330 73	19 27	.....	4 00	186 20	321 46	384 36	.....	66 03
July.....	262 87	36 96	2 00	4 00	139 53	54 04	221 71	.....	14 47
August.....	392 22	3 39	.....	12 00	477 18	322 35	171 33	.....	61 38
September.....	304 42	67 00	.....	12 00	137 61	30 27	179 03	1,419 89	1 32
October.....	343 12	49 29	.....	28 00	293 02	265 78	99 49	.....	6 54
November.....	127 74	138 58	72 00	24 00	257 49	270 99	403 06	222 45	347 21
December.....	82 33	59 78	4 00	12 00	129 50	124 62	469 88	.....	.....
Total ..	\$3,980 92	\$587 47	\$88 00	\$180 00	\$2,088 30	\$2,025 84	\$2,546 88	\$2,625 52	\$518 12

Financial Statement.—Lowell Water Works, 1891.

Statement showing total Water Works Outgo of year 1891, excepting Interest and New Engine with division of same into Construction and Maintenance. Amounts taken from foregoing tables :

MAINTENANCE.		CONSTRUCTION.	
LABOR.		LABOR.	
Meter Repairs,	\$ 874 43	Setting Meters,	\$ 633 71
Office and Inspectors,	7,370 94	Extensions, Hydrants set,	
Pumping Station,	5,311 57	etc.,	3,426 68
Reservoir,	606 84	New Services,	1,731 92
Relaid Services,	2,519 19	Conduit,	8,530 05
Wells, etc., (experimental,)	157 25	New Buildings,	147 87
General Maintenance,	6,098 91		
MATERIAL.		MATERIAL.	
General Expense,	1,274 79	New Material and General	
Stable Expense,	1,424 72	Construction,	\$ 6,294 74
Wells, etc. (experimental)	3,021 92	New Buildings,	16,558 77
General Maintenance,	3,278 64	‡New Services,	2,707 87
Reservoir,	334 84	Conduit,	20,125 90
Meter Repairs,	90 30	Meters set and owned	
*Meters set, City's expense,	938 00	by the City,	39 00
‡Relaid Services,	3,173 95		
Salary, Prest. and Supt.,	2,000 00		
Pumping Station,	16,186 05		
	\$ 54,662 34	Total to Construction,	\$ 60,196 51
		Total to Maintenance,	54,662 34
		||Pig lead on hand,	\$ 282 00
		Recharged Labor,	772 03
		Recharged Material,	2,472 30
		Refunds and Vacancies,	1,796 10
		Meters resold or to be sold,	4,868 07
		||Material on hand for ser-	
		vices and general work,	931 21
			11,121 71
Total Outgo less Interest (and New Engine,)			\$125,980 56

*Set to replace condemned meters,

‡239 New Services at estimated average cost, \$11 33.

257 Old Services and estimated average cost, 12 35.

||Valuation.

Financial Statement.—Lowell Water Works, 1891.

Statement showing application of Interest as paid by City Treasurer on account of Water Works.

Paid Old Water Loan Bonds :

May, 1890, 1 Coupon,	\$	30 00
Nov. 1890, 25 Coupons,		750 00

New Water Loan Bonds :

Interest due May, 1891, 600 Coupons		12,000 00
Interest due May, 1891, 747 Coupons		14,940 00
Lowell Inst. for Savings, 6 months Int.	\$200,000	6,000 00
Lowell Inst. for Savings, 1 year Int.	100,000	6,600 00
Lowell Inst. for Savings, 1 year Int.	100,000	6,500 00
City Inst. for Savings, 1 year Int.	50,000	3,250 00
Lowell Inst. for Savings, 6 months Int.	60,000	1,200 00
High Service Water Loan Bonds,	75,000	3,000 00

Total Interest Payment,		<u>\$54,270 00</u>
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Financial Statement. Lowell Water Works, 1891.

NEW PUMPING ENGINE EXPENDITURES.

New Engine Loan,	\$60,000 00
Paid H. R. Worthington, 1st paym't,	\$8,925 00
H. R. Worthington, 2nd paym't, \$17,850 00	
Less amount due Water Works,	362 19
	<hr/> \$17,487 81

Lowell Water Works for money
paid as per Invoice book, to

Western Union Tel. Co.,	\$ 1 12
Munn & Co ,	12 75
Knapp, Chas. L., Clerk,	297 18
Commercial Union Tel. Co.,	1 44
Morse & Sparks,	17 00
Hard F. Blanche,	5 14
Campbell & Hanscom,	6 33
Barrus, Geo. H.	495 30
Lowell Weekly Sun,	2 25
Lowell Morning Mail,	101 98
Lowell Daily News,	2 62
Lepine & Co.,	4 00
Engineering News Co.,	5 40
Engineering & Bldg. Record,	4 80
Critic Publishing Co.,	2 25
Marden & Rowell,	1 50
Dean, F. W.	25 00
Citizen Newspaper Co.,	2 62
Sullivan, W. F.,	3 50
Sundry persons as per pay rolls,	178 40
Wood R. D., for Force Main Pipe,	1,139 55

\$2,310 13

Cr. by brick sold Water Works

96 12

\$2,214 01

<i>Amount brought forward,</i>	28,626 82
Lowell Water Works for cash	
paid Sundry persons as per	
pay rolls,	152 40
Livingston Wm. E.,	69 05
Less amount paid R. Goulding properly charged to W. W.	51 75
	<hr/>
Spalding Wm. H. & Co.,	17 30
Burnham & Davis,	13 75
Western Union Tel. Co.,	39 00
Knapp, Chas. L. Clerk,	5 13
Morse & Sparks,	48 30
Campbell & Hanscom,	26 25
Barrus, George H.	1 50
Lowell Morning Mail,	701 30
Citizen Newspaper Co.,	2 17
Shaw, Frank E.	1 87
Spalding, W. H. & Co.,	12 60
Vox Populi,	4 50
Burnham, Forrest & Davis,	2 00
Howe Bros. & Co.,	42 49
Boston & Maine R. R. Co.,	11 90
Brennan, Miles F. President,	65 23
Buff & Berger,	285 72
Cawley, Edward	10 40
Corcoran, Patrick	410 00
Dunning, James R.	1,809 39
McCarthy, Daniel	75 00
Murphy, John F. & Co.,	2 00
City: Lands and Buildings,	2,432 97
City: Roads and Bridges,	166 74
Anderson, George W.	18 00
Bowers, George, Engineer,	387 45
Bennett, J.W. & Co.,	15 00
Bennett & Conlan,	5,894 36
Hanson, C. H.	3,390 05
Livingston, Wm. E.	43 40
Nelson, George A.	84 50
<i>Amount carried forward,</i>	2 64
	<hr/>
	44,802 13

<i>Amounts brought forward,</i>	\$44,802 13	\$60,000 00
Fletcher, H. E. & Co.,	144 00	
Gumb, L. D.	134 18	
Mack, W. A. & Co.,	233 94	
Mahan, James	233 12	
Scannell & Wholey,	2,890 16	
American Bolt Co.,	54 82	
Boutwell Brothers,	11 88	
Bartlett & Dow,	8 72	
Pratt, Amasa & Co.,	57 09	
Waldo Brothers,	90 00	
Goulding, Robert	165 66	
Whittier Machine Co.,	500 00	
Barker H. R. Mfg. Co.,	2 10	
Coburn C. B. & Co.,	16 03	
Locke Brothers,	150 00	
Shattuck, Horace B.	5 85	
Costello, T. & Co.,	290 74	
Farrell & Conaton,	1,113 47	
Runels, Charles	88 63	
Lowell Water Works for cash paid		
sundry persons as per pay roll	101 94	\$51,094 46
<hr/>		
Balance to Credit New Engine		
Account Jan. 1, 1892,		\$8,905 54
Final payment to H. R. Worthington is		\$8,925 00

COST OF NEW BUILDINGS DETAILED.

Paid Wiggin Wm. H.,	\$ 6,197 00
Farrell & Conaton,	787 36
O'Hearn, Patrick	3,104 84
Conlan, P.	3,977 00
Bennett, J. W. & Co.,	351 33
City Departments,	411 26
Mack, W. A. & Co.,	137 15
Pratt, Amasa & Co.,	52 31
Costello, T. & Co.,	708 26
Smith, E. A. & A. T.	591 04
Miscellaneous,	241 22
For Labor, as per pay rolls,	147 87
Total cost,	<hr/> \$16,706 64

COST OF NEW CONDUIT IN DETAIL.

Paid Wood, R. D. & Co., cast iron pipe,	\$14,097 60
For Labor, as per pay rolls,	8,530 05
Kittredge, Luther F., ledge work,	1,416 73
Costello, T. & Co., pig lead,	972 90
Miscellaneous,	3,638 65
Total cost,	<hr/> \$28,655 93

The following Table will Show the Expenditures and Receipts of the Works from 1873 to 1892, exclusive of Interest on the Water Debt and Expense of New Bond Plate in 1890.

	Expenditures.	Receipts.	Expenditures. in excess of receipts.	Receipts in Excess of Expenditures.
1873.....	\$188,376.59	\$57,739.48	\$130,637.11	
1874.....	128,105.63	80,625.65	47,479.98	
1875.....	170,095.78	94,908.14	75,187.64	
1876.....	115,012.24	98,815.54	16,196.70	
1877.	53,988.72	100,826.63	.....	\$46,837.91
1878.....	49,900.15	104,142.87	.....	54,242.72
1879.....	42,157.82	110,185.34	.....	68,027.52
1880.....	45,031.59	123,740.49	.....	78,708.90
1881.....	121,601.27	128,053.97	.....	6,452.70
1882.....	64,525.92	140,397.96	.....	75,872.04
1883	65,673.23	152,582.99	.....	86,909.76
1884.	64,982.71	154,437.55	.....	89,454.84
1885.....	64,030.24	157,956.79	.....	93,926.55
1886.....	51,808.52	168,757.53	.....	116,949.01
1887.....	62,236.05	178,234.29	....	115,998.24
1888.....	75,234.73	183,127.37	.....	107,892.64
1889.....	80,554.68	189,247.66	.....	108,692.98
1890.....	78,073.46	193,963.80	.....	115,890.34
1891.....	125,980.56	205,997.20	.....	80,016.64

Charges for Water by Months, from Commencement to Dec. 31, 1891.

MONTHS.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.
January . . .	. . .	\$ 363 94	\$ 418 96	\$ 150 45	\$ 126 51	\$ 169 14	\$ 282 44	\$ 233 73	\$ 182 58
February . . .	. . .	35 53	235 43	238 85	86 84	144 38	238 19	349 08	146 40
March	\$ 6,124 94	50,200 10	65,417 68	82,249 51	89,177 52	82,225 43	80,603 69	80,567 44	89,210 88
April	785 89	1,739 50	935 20	265 34	584 11	1,970 12	9,242 84	6,478 39	540 20
May	2,988 16	3,274 09	2,147 96	874 47	1,819 65	1,121 43	2,751 35	1,476 15	879 61
June	5,818 78	2,865 86	2,887 43	4,460 91	2,389 52	3,903 69	6,126 86	868 08	12,574 12
July	4,833 52	1,889 03	1,926 31	582 68	3,147 78	1,261 24	1,213 13	11,457 84	273 00
August	2,728 30	498 50	449 86	771 87	799 88	677 01	563 35	459 17	514 46
September . .	2,827 07	3,245 06	865 90	495 97	3,493 90	4,998,07	6,584 86	8,108 23	10,088 19
October	9,729 05	872 10	2,947 93	4,893 44	543 79	663 80	454 29	338 51	309 22
November . . .	761 21	634 03	573 35	1,445 65	518 72	1,220 27	1 405 89	620 56	873 16
December . . .	1,571 72	3,689 79	3,955 59	3,246 39	4,040 71	4,522 75	5,794 77	7,851 52	9,593 32
Totals	\$39,168 64	\$69,307 39	\$82,861 60	\$99,674 93	\$98,178 93	\$102,877 32	\$115,261 20	\$118,808 70	\$125,975 27
Less Abatement to date, }	. . .	1,872 83	640 06	8,185 88	2,502 65	4,343 13	9,590 05	1,702 13	3,766 88
Net amounts,	\$39,168 64	\$67,434 56	\$82,221 54	\$91,489 05	\$95,676 28	\$98,534 19	\$105,671 15	\$117,106 58	\$122,208 39

Charges for Water by Months, from Commencement to Dec. 31, 1891 (continued.)

MONTHS.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.
January . . .	\$ 233 37	\$ 271 52	\$ 472 76	\$ 702 05	\$ 410 21	\$ 427 66	\$ 454 33	\$ 420 32	\$ 720 57	\$ 573 53
February . . .	139 22	136 06	347 66	352 90	439 68	439 98	343 06	495 71	404 09	637 53
March . . .	90,856 37	94,956 65	98,692 13	102,961 30	104,537 77	111,281 68	110,812 26	114,110 39	122,505 39	122,162 39
April . . .	403 64	263 10	351 73	439 64	1,355 01	773 67	536 02	1,219 74	2,063 77	1,374 42
May . . .	1,191 41	984 84	1,495 90	1,062 34	1,760 48	2,057 80	1,750 52	2,618 47	2,886 65	3,085 40
June . . .	16,401 62	17,757 44	18,709 27	21,203 61	23,768 43	23,017 09	26,090 68	25,322 78	23,829 83	30,993 24
July . . .	959 80	1,059 37	899 21	1,053 36	1,434 99	2,383 37	1,781 40	1,323 39	1,280 10	1,483 44
August . . .	634 40	902 76	984 17	828 40	1,173 44	927 65	1,072 41	1,273 06	1,359 20	1,494 60
September . . .	10,904 30	12,467 32	12,939 94	13,452 97	16,105 05	18,397 55	16,773 25	16,288 39	20,813 65	20,075 97
October . . .	552 27	941 81	738 12	697 87	783 29	1,108 16	1,414 52	1,107 60	1,357 71	939 54
November . . .	378 97	1,615 65	693 41	477 10	686 02	683 55	937 19	874 11	1,008 28	979 58
December . . .	10,848 08	12,512 70	12,544 55	12,617 45	12,825 41	15,927 35	14,476 76	15,096 53	15,387 52	18,658 99
Totals . . .	\$133,503 45	\$143,869 22	\$148,028 85	\$155,848 98	\$165,279 78	\$177,425	\$176,442 40	\$180,155 49	\$193,616 76	\$202,458 63
Less abatements to date.	2,490 50	3,094 15	4,314 79	3,946 34	2,991 18	2,367 70	2,794 87	15,414 91	4,909 39	4,606 41
Net amounts . . .	\$131,012 95	\$140,775 07	\$144,614 06	\$151,902 64	\$162,288 60	\$175,057 81	\$173,647 53*	\$174,740 58	\$188,707 37	\$197,852 22

*A reduction of \$6,084.00 is accountable, owing to reduction of annual charge for fire hydrants.

†Abatements represent errors in making charges, clerical errors, abatements voted by Water Board, etc. A large item is that of abated rates as charged in annual account, and abated on account of meters set during the year.

The following will show the gross and the net cost of the Water Works to January 1, 1892 :

Total expenditures to Jan. 1, 1891, (City Auditor)		\$4,841.27 1 27
“ “ of 1891,		180,250 56
“ “ on New Engine Act. to Jan. 1, '92,		51,094 46
		<hr/>
Gross cost to January 1, 1892,		\$5,072,616 29
Receipts to December 31, 1890,	\$2,453,454 47	
Receipts of 1891,	205,997 20	
	<hr/>	\$2,659,451 67
		<hr/>
Net cost of Works to January 14, 1892,		\$2,413,16 62

REPORT OF THE SUPERINTENDENT.

Gentlemen of the Lowell Water Board:

As required by the ordinance, the Superintendent presents the annual report of work done under his charge for the nine months commencing April 1st, ending Dec. 31, 1891.

During the month of April there was but little done with extensions, there being no 6-inch pipe on hand; but for the rest of the year extensions were put in on Streets, making the total amount,

On Low Service.....	8,487 feet
On High Service,.....	1,811 "
	<hr/>
	10,298 "
30-inch Conduit.....	4,350 "
	<hr/>
	14,648

This will give a little over 62 feet of main pipe for every working day, laid during the nine months, or 234 days. The 4-inch pipe in Perrin Street was taken out and replaced with 6-inch, 366 feet. About 125 feet of 6-inch pipe had to be lowered on C Street on account of change of

grade. In this connection I would suggest that the City Engineer give grade in all cases where none has been given before putting pipe into the streets and save expense of having to make changes after.

CONDUIT SUPPLY LINE.

The largest and most important extension made this year was the 30-inch supply main laid from Beaver Brook to Engine House well. The work on this conduit line was commenced at the hill on the Lawrence Company's land where it was known we should find ledge. On the 17th of June ground was broken and uncovered about 150 feet in length and averaged 8 feet deep of the hardest kind of rock. The depth of the trench through the hill would average 15 feet. The work was somewhat put back by the waiting for specials, and also having to go through the entire length of Gage's ice house, that having been built on the conduit line.

Starting from Beaver Brook this new conduit line was laid, starting 20 feet from the old 30-inch line and running parallel with it to West Street, then 10 feet to wells. At the Brook on the old line there was a branch capped which was connected with and a 30-inch gate put between the two lines and another branch put on to the new line and capped for future use to cross the Brook with. There are 3 16-inch manholes on this

line at proper places. In connection with this job there was a 30-inch sluice-gate put in at the Engine House well. With this gate and the one at Beaver Brook the supply conduit lines can be used as wanted. The new supply or conduit line will give 2 1-2 million gallons more in 24 hours than before.

NEW FORCE MAIN.

In connection with this I would say that the 24-inch force main was cut and a 24-inch Y put in; then 8 1-4 feet of 24-inch pipe, on which was put in a 24-inch gate, connecting the gate with a 24 x 30 reducer to 30-inch Y, then running 141 feet to connect with the 30-inch flange pipe put in by H. R. Worthington. The other end of the 30-inch Y was capped from which the 30-inch main is to continue to reservoir, or use the new engine to pump through the 24-inch line.

FILTER INLET.

The filter inlet was cleaned and 50 loads of clean sharp sand put on to the depth of 4 inches, Oct. 23. Closing the river gate, the engines run 9 hours and 15 minutes, 8 59.100 turns (usual No. 12 1-2) and pumped 2,066,560 gallons, then had to open river gate.

BLOW OFFS.

The water has been blown from the mains four times the past season. One new blow off has

been put in at the canal on Broadway, 8-inch, which does good service. At this bridge the 8-inch pipe crosses on a wood truss and is covered to protect the wood. This covering having become rotten it has been replaced with new. There were two more blow-offs voted to be put in but I could not put them in without the consent of the Sewer Department as they wanted to do the work in connection with their being put in, and before they got ready it was late. Another season they can be put in.

RESERVOIR.

There has not been any outlay of more than painting the fence and concreting at the gateway and repairing the fountain which was broken last year.

FORCE MAINS.

There has been no trouble or expense with these lines except the changing over the high service line in cellar at Engine House to accommodate the new 30-inch force main for new engine.

GALLERY GATE HOUSE.

The ground around the Gallery gate house where the screens are taken to clean has been concreted to prevent the washing away of the bank.

CONDUIT LINE.

There has been no trouble with the conduit line except at the Bodwell gate house overflow where the bank caved in. This has been repaired for the winter but it needs more done to put it in condition to stand for time.

GATES AT BEAVER BROOK.

The one on the west side where the brick chamber had settled has been fixed. The 6-inch blow-off gate and the 30-inch gate on the supply line at the east side have had brick chambers built enclosing them safely from harm.

SEWERS.

This department has had much trouble with mains in Lawrence and Tanner Streets, on account of sewers being put in. It was necessary to take out on Tanner Street 100 feet of 10-inch pipe, move two hydrants, one gate, besides being called often to repair leaks caused by settling of the pipe on account of sewers. Had about the same experience on Lawrence Street. This goes to show that care must be taken in locating pipes when put in so that the sewers will not get near enough to mains to make trouble.

WESTERN AVENUE EXTENSION.

The extension from Dutton Street to Western Avenue was made for better protection from fire in this particular locality. Previous to this extension all the service this avenue had was through the 6-inch pipe from Fletcher Street, which run to a dead end. Connecting with the 12-inch line on Dutton Street near Howe Bros. & Co., an 8-inch line was run under the tracks of Boston & Maine Railroad (by the permission of Mr. Furber, manager of B. & M.,) to the 6-inch on Western Avenue, putting on a 4-way post hydrant, and connecting with the 6-inch line on Western Avenue. Now, there are two feeders to Western Avenue from 12-inch lines, making a through connection from Fletcher Street to Dutton through Western Avenue.

STEVENS AND FORREST STREETS.

I would call the attention of the Board to the fact that an extension from the end of pipe, now in Forrest Street ought next season sure to be extended to connect Chelmsford Street, a distance of 675 feet. At the present time should any trouble happen on the Stevens Street line from Parker Street, the whole line would have to be shut off from junction of Stevens and Parker Streets to the end of Forrest Street, a distance of nearly three-quarters of a mile.

GATES.

There are quite a number of gates wanted in different parts of the works to shorten up shutting off so much territory when there is any trouble or in making connections. In some districts it will take two men an hour or more to notify takers when we have a connection to make. When there is a break, of course we do not stop to notify, but shut off at once. I should think we ought to put in 50 gates, mostly 6-inch.

SHED AT PUMPING STATION.

I would recommend that the land, on the north side of the stable yard, be covered with a shed. More room is wanted for hydrant and gate boxes, service boxes and connections—lumber to make the hydrant and gate boxes—at times when there is little else to do. We also want a place to keep wood for melting lead on the streets, in connection with the mains. We want more shed room, badly, and have not room for all wagons and sleighs at the same time.

BREAK ON THE 20-INCH MAIN.

This occurred on the 15th of August, and was caused by the settling of a foundation stone at the freight house on Tilden Street, of the Merrimack Corporation. The main was cracked about 8 feet in length. The break was repaired, and water let

on next day (Sunday) at 12 M. With this exception most of the breaks in main have been caused by blasting in the sewers.

GENERAL REPAIRS ON STREETS.

Put in 75 new hydrant and gate boxes, besides repairing many others. Four men have been most of the season at work on repairs connected with street work.

LOWRY HYDRANTS.

There have been two Lowry Hydrants put in: One at corner of Market and Dutton Streets; one at Dutton Street, at Lowell Machine Shop.

POST HYDRANTS.

Seventeen Post Hydrants and one Flush, put in on low service.

Two Post Hydrants on high service.

One post moved from Fairmount Street across to Boylston Street, on account of City taking land that left the hydrant in the street.

Repaired 24 hydrants that were leaking.

Repaired 2 hydrants, broken by teams running against them.

Moved 8 hydrants, caused by change in grade of street.

Put in 4 new ones on old lines.

GATES.

Repaired gates that were leaking	11
Repaired gates that were broken	5
Gates put in with mains, 4-inch	4
Gates put in with mains, 6-inch	24
Gates put in with mains, 8-inch	3
Gates put in with blow off, 8-inch	1
Supply Main, 30-inch	1
Force main, 24-inch	1

30-INCH INLET PIPE AT RIVER.

There should be some provision made to run a walk from the shore to the end of the 30-inch inlet pipe, that a man could go out and clear the anchor ice from the end of the pipe, which, at certain times of the year gathers there and cuts off the supply. Have been obliged to shut the engines down within a week on this account.

NEW BUILDINGS.

All the business connected with the Department, that has heretofore been done at the pipe yard on Broadway, with exception of large pipe and specials, has been transferred to new buildings at Pumping Station, where the whole can be under the eye of the Superintendent with less trouble to all connected, when things become well systematized, which will be in a short time.

The matters connected with Pumping Station will be embodied in Engineer's and Water Board reports.

In conclusion, I return my thanks to the Water Board, Clerk, Engineer and all connected with me on the works for generous support.

I am also under obligations to Col. Francis and Mr. George Farnham of the Gas Works for favors given.

S. P. GRIFFIN, *Superintendent.*

Low Service—List of Stop Gates Set During the Year 1891.

STREETS.	LOCATION.	4-inch.	6-inch.	8-inch.	10-inch.	12-inch.
A.....	12.5 feet south of north line A, on west line South Walker.....		1			
A.....	14 feet north of south line A, on east side Powell.....		1			
Bellevue.....	2.4 feet south of south line Westford; 13.2 east of west line, Bellevue.....			1		
Burnside.....	27 feet east of west line Burnside, on south line Middlesex.....		1			
Coburn lane.....	10 feet south of north line Coburn lane, on west line Chelmsford.....		1			
Congress.....	6.9 feet south of north line Congress, 6.3 feet east of east line. Thorndike.....	1				
Congress.....	3 feet south of north line Congress; 65 feet east from angle in street at Jacob's land....	1				
Cosgrove.....	19.5 feet south of north line Cosgrove, on line of Stormquest avenue.....		1			
Dalton.....	13 feet south from north line Dalton; 6 feet west from west line, Aiken avenue.....		1			
Dutton.....	Southerly side Dutton; 45 feet east of east line, Howe Bros. lumber office.....			1		
Edson.....	13.5 feet east of west line Edson, on south line Princeton.....		1			
Eighteenth.....	12.7 feet north of south line Eighteenth, on east line Beacon.....		1			
Fred.....	2 feet north of Lakeview avenue; 26.5 east of west line, Fred.....		1			
French.....	15.8 feet south of north line French, on west line Bridge street.....		1			
Middlesex.....	4 feet south of north line Middlesex, 54 feet west of post hydrant opposite Pickering Knitting Co.'s mill.....	1				
Midland.....	26.5 feet north of south line Midland on west line Blodgett.....		1			
Perrin.....	10 feet south of north line Perrin, on west line School.....		1			
Pine.....	27 feet east of west line Pine, on south line Westford.....		1			
Pleasant.....	13 feet east of west line Pleasant, 1 foot north of north line Sherman.....		1			
Quebec.....	12 feet west from east line Quebec, on south line Lincoln.....		1			
School.....	17 feet west from east line School, 1.5 feet south of south line Middlesex.....		1			
School.....	16 feet west of east line School, 1 foot north of north line Branch.....		1			
Stanley.....	11.5 feet east of west line Stanley, on north line Lakeview avenue.....		1			

Low Service—List of Stop Gates Set During the Year 1891 (continued.)

STREETS.	LOCATION.	4-inch.	6-inch.	8-inch.	10-inch.	12-inch.
Washer.....	18 feet west of east line Washer, 2 feet north of northeast line Meadowcroft.....	1				
Westford	15 feet south of north line Westford, on east line West Pine.....			1		
Winthrop avenue.....	12 feet south of north line Winthrop, on west line Powell.....		1			

High Service.

STREETS.	LOCATIONS.	4-inch.	6-inch.	8-inch.	10-inch.	12-inch.
Boylston.....	15 feet south of north line Boylston, west line Rogers... ..		1			
Laurel.....	13 feet south of north line Laurel, on west line Holyrood avenue.....		1			
Parkview avenue.	13 feet east of west line Parkview avenue, on north line Hovey.....		1			
Parkview avenue.....	13 feet east of west line Parkview avenue, 2 feet south of south line Hovey.....		1			
Sycamore	12 feet north of south line Sycamore, on east line Fairmount.....		1			

Low Service--List of Hydrants Set During the Year 1891

STREETS.	LOCATION.
Cosgrove.....	Southerly side, 3.5 west of west line Stormquest avenue.
Dalton.....	Northerly side, about 20 feet west from west line Aiken avenue.
*Dutton... ..	At Market.
*Dutton.....	Opposite Lowell Machine shop.
Fletcher.....	East side, 1 foot north of north line Liberty square.
Fred.....	Westerly side, 197 feet north of Lakeview avenue.
Hanks.....	Easterly side, 48 feet north of angle in street near Drury's house.
London.....	Easterly side, 3 feet south of south line Eaton.
Main.....	Easterly side, 4 feet south of south line Canada.
Midland.....	Northerly side, 5 feet west of west line Blodgett.
Perrin.	Northerly side, 344 feet west of west line School.
Powell.....	Easterly side, 2 feet south of south line A.
Quebec.....	Easterly side, 203 feet south from south line Lincoln.
School.....	Easterly side, 153 south from south line Middlesex.
Sherman.....	Northerly side, 9.5 feet west of west line Pleasant.
Stanley	Westerly side, 8 feet south of south line Riverside avenue.
Western avenue..	Northerly side, opposite Burnham & Davis' lumber yard.
Westford.....	Northerly side, 10 feet east of east line West Pine.
West Ninth... ..	Northerly side, 317 feet west of west line Bridge.

*Lowry hydrants.

Low Service—Water Pipes Laid in 1891.

STREETS.	BETWEEN WHAT STREETS.	LENGTH IN FEET.					Total.
		4-in.	6-in.	8-in.	10-in.	12-in.	
A	Extended westerly from South Walker.....		314.5				314.5
A	Easterly from Powell.....		258.				258.
Aiken ave.....	Northerly from Dalton.....		188.5				188.5
B.....	Extended easterly.....		108.				108.
Bellevue.....	Southerly from Westford.....			335.			335.
Blodgett.....	Extended southerly.....		108.				108.
Boynton.....	Extended southerly.....		192.				192.
Burnside.....	Southerly from Middlesex.....		166.				166.
Coburn lane.....	Westerly from Chelmsford ..		246.7				246.7
Congress.....	Extended easterly.....	144.5					144.5
Congress.....	To W. Coburn's mill yard....	34.					34.
Cora.....	Northwesterly from Gershom ave		196.3				196.3
Corner.....	Easterly from Warwick.....		120.				120.
Cosgrove.....	Extended easterly.....		423.5				423.5
Dalton.....	Extended southeasterly..		154.5				154.5
Dutton.....	Dutton and Western ave.....			138.			138.
Edson.....	Extended northerly.....		51.				51.
Eighteenth.....	Easterly from Beacon.....		225.5				225.5
Fred.....	Northerly from Lakeview ave.		435.5				435.5
Gershom ave.....	Extended northeasterly.....		129.5				129.5
Humphrey.....	Extended northerly.....		175.				175.
Irving.....			140.				140.
	Carried forward.....	178.5	3632.5	473.			4284.

Low Service—Water Pipes Laid in 1891 (continued.)

STREETS.	BETWEEN WHAT STREETS.	LENGTH IN FEET.					Total.
		4-in.	6-in.	8-in.	10-in.	12-in.	
	<i>Brought forward</i>	178.5	3632.5	474.			4284.
Jemess.....	Extended westerly.....		100.				100.
Lamb.....	Extended southeasterly.....		204.				204.
Middlesex.....	To Pickerings Knitting Co.'s mill.....	217.7					217.7
Midland, ..	Westerly from Blodgett.....		148.5				148.5
Perkins.....	Easterly from Ward.		170.				170.
*Perrin.....	Westerly from School.....		366.				366.
Pine.....	Southerly from Westford.....		419.5				419.5
Pleasant.....	Northerly from Sherman.....		152.5				152.5
Princeton.....	Easterly from Edson.....		34.				34.
Quebec ...	Southerly from Lincoln.....		219.				219.
School. ..	Middlesex and Branch.....		445.5				445.5
Shedd.....	Southerly from West Ninth...	118.					118.
Sherman.....	Extended easterly to Pleasant.		84.				84.
Stanlêy.....	Northerly from Lakeview ave.		183.				183.
Stormquest ave....	Northerly and southerly from Cosgrove.....		224.				224.
Warwick	Corner and Harding.....		144.				144.
Washer.....	Northeasterly from Meadowcroft.....	141.					141.
Weed	Extended easterly.....		119.				119.
Westford.....	Easterly from Pine.....			154.			154.
West Fourth.....	Extended and connected.....		73.				73.
West Ninth.....	Extended westerly.....	160.					160.
	<i>Carried forward</i>	815.2	6718.5	627.			8160.7

Low Service—Water Pipes Laid in 1891 (continued.)

STREETS.	BETWEEN WHAT STREETS.	LENGTH IN FEET.					Total.
		4-in.	6-in.	8-in.	10-in.	12-in.	
	<i>Brought forward</i>	815.2	6718.5	627.			8160.7
Whitney ave.....	Extended westerly.....		96.				96.
Winthrop ave.....	Westerly from Pcwel.....		175.				175.
Woodward ave.....	Extended southwesterly.....		84.				84.
†Western ave.....	Extended westerly.....		297.				297.
Hydrants.....			138.5	8.			146.
Laid in 1891.....		815.2	7509.	635.			8959.
*Less 4-inch, taken out Perrin street.....							331.
Total.....							8628.

†Pipe laid in 1876 never reported until March, 1891.

High Service—Water Pipes Laid in 1891.

STREET	BETWEEN WHAT STREETS.	LENGTH IN FEET.					Total.
		4-in.	6-in.	8-in.	10-in.	12-in.	
Boylston.....	Southwesterly from Rogers....		473.5				473.5
Holyrood ave.....	Northerly from Laurel... ..		120.				120.
Laurel.....	Extended easterly.....		98.				98.
Parkview ave.....	Extended northerly.....		699.				699.
Rogers.....	Extended northerly.....				136.		136.
Sycamore.....	Easterly from Fairmount....		163.				163.
Wentworth ave....	Extended northerly.....		108.				108.
	Hydrants.....		14.				14.

Laid in 1891..... 1675.5 136. 1811.5

High Service laid previous to 1891..... 22,542.0

Total High Service to Jan. 1, 1891..... 24,323.5

High Service—List of Hydrants Set During the Year 1891.

STREETS.	LOCATION.
*Boylston.....	Northerly side, 8.5 southwesterly from west line Rogers.
Parkview ave.....	Westerly side, 7.0 northerly from north line Hovey.
Wentworth ave....	Westerly side, 11.5 south of north line Eveleth's land.

*Post Hydrant on Fairmount street taken out.

Brought forward.....	8628
Low Services laid previous to 1891... ..	464,089
Total Low Service to Jan. 1, 1892.....	472,717
Total High Service to Jan. 1, 1892.....	24, 353
Total High and Low Service to Jan. 1, 1892.....	497,070
Total in miles 94.14.	

Number and Kind of Services Changed During Year 1891.

SIZE OF SERVICES CHANGED FOR.		$\frac{5}{8}$ inch lead.	$\frac{3}{4}$ inch lead.	1 inch lead.	Number of feet.
10	$\frac{3}{4}$ -inch iron.....	433			433
202	$\frac{3}{4}$ -inch iron.....		6807		6807
34	$\frac{3}{4}$ -inch iron.....			1229	1229
1	$\frac{3}{4}$ -inch lead.....			48	48
2	1-inch iron.....		76		76
6	1-inch iron.....			433	433
1	1½-inch iron.....		38		38
1	$\frac{5}{8}$ -inch lead.....			50	50
257	Total.....	433	6921	1760	9114

Schedule of Small Pipe Laid.

STREETS.	Lead.	IRON.		Total feet.
	1-inch.	1½-inch.	2-inch.	
Parker.....	136			136
Forrestview avenue.....			118	118
Fay.....		200		200
Mapleview avenue.....			120	120
Total.....	136	200	238	574

New Services.

39	$\frac{5}{8}$ -inch lead pipe.....	1,147 feet
179	$\frac{3}{4}$ -inch lead pipe.....	5,960 "
23	1-inch lead pipe.....	532 "
2	1-inch iron pipe.....	294 "
1	$1\frac{1}{2}$ -inch iron pipe.....	23 "
2	2-inch iron pipe.....	137 "
<hr/>		
239	Total laid during 1891.....	8,093 "
	Amount previously laid.....	319,616 "
	Total now laid.....	327,709 "
Or 62 miles 349 feet.		
	Total number services put in.....	8,971 "
	Total cut off at main.....	477 "
	Total re-connected.....	38 "
	Total now in use.....	8,532 "

Meters Running January 1, 1892.

SIZES IN INCHES.	$\frac{5}{8}$ in.	$\frac{3}{4}$ in.	1 in.	$1\frac{1}{2}$ in.	2 in.	3 in.	4 in.	Total
Desper	337	125	52					514
Worthington . .	267	25	48	70	35	9	3	457
Crown	360	475	154	1	6	1	2	999
Duplex	9	13	9					31
Ball & Fitts . .	8	2	1	1				12
Fitts Rotary . .	3	1						4
Frost	32	10	3	1	1			47
Thompson	1	9	2					12
Gem					1			1
Hersey	2	10	3					15
<hr/>								
Total	1019	670	272	73	43	10	5	2092

All motors in the City are now on meters, from which consumption is obtained.

Private Meters Running January 1, 1892.

SIZES IN INCHES.	$\frac{5}{8}$ in.	$\frac{3}{4}$ in.	1 in.	2 in.	Total
Desper	1	3	1		5
Worthington			1	1	2
Crown	17	15	1		33
Duplex	1				1
Frost	2	1			3
Thompson	4	1			5
Hersey	1				1
Nash	1				1
Total	27	20	3	1	51

Number of meters taken out, to repair and test, from April 1, 1891 to January 1, 1892: 146.

Number of meters repaired without removing from cellar: 156.

Number of new meters set: 151.

Number of new meters set during year, January 1, 1892: 175.

PROPERTY AT PIPE YARD JAN. 1, 1892.

CAST IRON PIPE AND SPECIALS.

DIAMETER IN INCHES.	4	6	8	10	12	16	20	24	30
Lengths.....	22	261	24	175	10	30	14	5	12
Sleeves.....	14	7	22	9	20	10	6	7	10
Caps.....	34	12	34	2	15	2	1	1	
Plugs.....	2	2	10	5	3				
Curves.....	1½	12½	8½	2½	4½	1½	3 1-16	3½	4 1-16
		7¼	1¼		5¼		4½		1½

SPECIALS.

DIAMETER IN INCHES.	4 x 4	6 x 4	6 x 6	8 x 4	8 x 6	8 x 8	10 x 4	10 x 6	10 x 8	10 x 10	12 x 4	12 x 6	12 x 8	12 x 10	12 x 12	16 x 8	16 x 12	16 x 16	16 x 10	16 x 6
Three-ways.....	5	1	5	1	10	3		2	5		3	1	2	2	2	1				1
Four-ways.....	6		5		1	6			1			6	2		4		2	1		1
Reducers		6		2	10			10	1			8	8				1		4	

Stop gates, 2 12-inch, 2 10-inch, 5 8-inch, 8 6-inch, 4 4-inch; 21 lengths of 6 inch drain pipe; 7 hydrant boxes, 12 gate-boxes; 1000 feet of lumber for boxes; ½ keg 30d nails; 560 feet 2-inch iron pipe; 500 brick; 15 leather valves for hydrants; 1 box dualin; 30 assorted packings for gates; 145 assorted packings for hydrants; 12 hydrant frames and covers; 9 gate frames and covers; 5 meter boxes; 11 1-inch Crown meters; 25 3-4 inch, 18 5-8 inch, 6 3-4 inch Hersey meters; 3 1-inch unions for Crown meter; 47 3-4 inch, 82 5-8 inch; 8 tops for 5-8 inch Crown meter; 8 tops for 1-inch Crown; 11 tops for 3-4 inch Crown; 100 rubber spindle packings for Worthington meter; 3 2-inch meters; 3 tops for 2-inch Worthington meter; 5 tops for 1 1-2 inch, 6 tops for 1-inch, 1 top for 3-4 inch, 6 tops for 5-8 inch, 3 spindles for 2-inch Worthington meter; 5 1 1-2 inch, 6 1-inch, 1 3-4 inch, 6 5-8 inch, 3 arms for Worthington meter; 5 for 1 1-2 inch, 6 for 1-inch, 1 for 3-4 inch, 6 for 5-8 inch, 20 assorted caps for Worthington meters; 1 3-4 inch, 2 1 1-2 inch Frost meters; 37 earthen sidewalk boxes; 6 3-foot extensions for sidewalk boxes, 35 2-foot, 30 1-foot stop and waste cocks; 12 1-inch sidewalk, 20 1-inch cellar cocks; 191 3-4 inch sidewalk cocks; 57 3-4 inch cellar cocks; 24 1-inch corporation cocks; 237 3-4 inch corporation cocks; 81 1-inch corporation unions; 414 3-4 inch unions; 37 3-4 inch cellar cock unions; 14 1 1-2 inch solder nipples; 51 1-inch, 78 3-4 inch, 38 1-inch sidewalk cocks for iron pipe; 8 1-inch iron nipples; 19 1 1-2 inch nipples; 5 1x3-4 inch brass couplings, 3 1-inch, 53 3-4 inch, 49 3-4x1-2 inch; 9 1-inch brass elbows, 11 1x3-4 inch, 7 3-4x1-2 inch; 18 1 inch iron elbows; 11 1x3-4 inch iron elbows; 7 1x1-2 inch iron, 12 3-4 inch, 10 3-4x1-2 inch, 10 3-4 inch brass tees; 8 1-inch iron couplings, 6 1x3-4 inch, 10 3-4x1-2 inch; 5-pound assorted leather washers; 200 pounds leather for washers; 1 roll paper for meter packing; 7 lengths 2 1-2 inch hose, 350 feet long; 5 gallons naphtha; 5 pairs long rubber boots; 10 short pairs; 1 broom; 11 scrub brooms; 100 pounds old brass; 2 pounds sealing wax; 11 gauge connections for testing hydrants; 54 assorted gate-spindles; 55 hydrant spindles; 21 spindle-heads; 4 pistons for 1-inch Worthington meter; 10 for 3-4 inch, 20 for 5-8 inch; 1 Edison pump; 1 Edison pump diaphragm; 25 round collars for sidewalk boxes; 3 square collars; 28 plugs for sidewalk boxes; 2 reels 3-4 inch lead pipe; 1300 pounds solder; 160 pounds coal; 2 brass force-pumps; 50 feet 1-4 inch tin tubing; 200 pounds old brass meters; 100 pounds old Desper meters pistons and tops; 6000 pounds pig lead; 5 gallons kerosene; 1 leather nozzle for 2 1-2 inch hose; 50 pounds clay; 10 pounds jute packing; 10 tamping mauls; 11 nuts for gate-spindles; 8 iron 2x1 inch crosses; 4 1 1-2 inch elbows; 12 1 1-2x1 inch, 20 1 1-2 inch unions; 2 2x1 1-2 inch tees; 20 1 1-2x1 1-2 inch, 8 2x1 inch Y's; 27 1 1-2 inch plugs; 9 1-inch crosses; 9

1-inch plugs; 6 1 1-2 inch right and left couplings; 50 3-4 inch plugs; 8 1 1-2x1 inch crosses; 4 1 1-2 to 1 inch reducer; 10 1-inch 1-8 turns; 32 assorted goose necks for meters; 2 1 1-2 inch Chapman valves; 4 loads slab-wood; 2 gross lantern wicks; 1 1-2 bushel salt; 1 1-2 barrel cement; 9 bars 5-8 inch round iron; 7 bars 3-4 inch round iron; 10 2-inch brass unions for meters; 2 1 1-2 inch; 18 new Worthington clocks; 9 hand hammer-handles; 17 assorted goose necks; 1 Lowry hydrant, frame and cover; 1 12x12 inch 3-way for Lowry hydrant; 31 hydrant tops; 1 man-hole on 30 inch pipe.

Tools at Machine Shop Pumping Station.

1 8x10 plain-slide valve engine; 1 grindstone; 1 upright drill; 1 10-foot engine lathe; 1 7-foot engine lathe; 1 5-foot speed lathe; 1 shaper; 1 emery wheel; 2 soldering furnaces; 1 large universal chuck; 1 small sud chuck; 1 large sud chuck; 45 turning tools; 14 flat chucking drills; 32 flat drills; 17 twist drills; 3 drill chucks; 14 washer-cutters; 1 wire gauge; 19 steel arbors; 4 large twist drills; 1 pair burner pliers; 1 pair flat pliers; 12 lathe dogs; 3 soldering irons; 10 files; 3 reamers for Desper meters; 2 lathe cutters with arbors; 12 taps; 19 reamers; 3 tap wrenches; 1 adjustable tap wrench; 1 hand vise; 2 bench vises; 1 belt-punch; 1 pair scales; 1 step-ladder; 1 clock; 1 map showing stop-gates.

Tools in Tool-House at Stable.

Five hundred pounds steel drills; 54 picks; 19 square pointed shovels; 38 round shovels; 24 pick-handles; 12 crow-bars; 2 steel bars; 17 mauls; 8 striking hammers; 4 sledge-hammers; 13 square head gate-wrenches; 13 small gate-wrenches; 7 sidewalk wrenches; 1 battery and wires; 4 paving mauls; 1 copper boiler; 1 rake; 2 scoop shovels; 2 hoes; 1 dozen hydrant wrenches; 4 Dutchmen; 4 derrick falls; 3 tag ropes; 100 feet new rope; 2 marine pumps; 10 pairs rubber boots; 5 suction hose for pumps; 8 lengths 2 1-2 hose; 5 ladles; 17 lanterns; 9 chains; 2 lead pots; 5 caulking hammers; 4 pails; 32 lantern globes; 50 feet 1-inch rubber hose; 1 long-handle shovel; 1 scoop dipper; 2 small oil-cans; 3 kerosene oil cans; 12 caulking tools; 6 cutters.

Tools at Machine Shop Pipe Department.

Four Stillson wrenches; 8 monkey-wrenches; 1 screwdriver; 1 hammer; 3 tapping machines; 3 full sets of rubbers for tapping machines; 12 taps; 1 hand-boring bar; 1 gate-ratchet; 4 oil-cans; 2 1-inch combination taps and drills; 4 files; 2 cold chisels; 5 assorted wrenches; 1 3-4 inch combination tap and drill; 1 ladle; 1 grease-box; 1 rasp; 4 pipe cutters; 8 die stocks; 22 dies; 12 pipe tongs; 2 pipe vises; 3 ratchets; 3 small hand-pumps; 1 portable forge; 1 stationary forge; 1 coil block-tin rod; 2 coils block-tin tube; 1 set blacksmith tools; 1 hand-saw; 1 solder-pot; 1 charcoal furnace; 1 set numbers; 1 nail-puller; 1 draw-shave; 1 marlin-spike; 10 steel drills; 1 galvanized pail.

Tools in Meter Department.

Two small meter-wrenches; 2 Stillson wrenches; 2 monkey-wrenches; 1 pair pliers; 2 screwdrivers; 1 lamp; 1 pair scissors; 1 Lowell water works seal; 1 cold chisel.

Tools at Reservoir.

Two scythes; 3 rakes; 1 crow-bar; 1 hammer; 1 saw; 1 ax; 1 square; 2 picks; 2 iron rakes; 2 long-handle shovels; 4 common shovels; 1 lawn-mower; 2 planks; 4 steps; 1 hoe; 1 ice-chisel; 1 fork; 50 feet hose.

Property in Water Board Office.

Eighteen chairs; 5 high chairs and stools; 1 letter-press; 5 desks with drawers; 3 standing desks with drawers; 4 office tables; 1 cabinet letter-file; 2 bill-cabinets; 1 bill-holder; 1 black-walnut cabinet; 1 safe; 1 clock; 3 waste-baskets; 7 spittoons; 4 street wrenches; 1 rubber mat; 2 brooms; 1 dust-pan; 1 map distributing mains; 1 map water-works system; 1 map of Lowell; 1 atlas of Lowell; 1 water-gauge; 1 pressure and recording gauge, with an alarm bell attachment; 1 screwdriver; 1 hammer; 1 hat-rack; 1 instrument for testing capacity of engines; 1 umbrella-rack; 1 water-cooler; 1 feather-duster; 1 type-writing machine; 1 glass drinking mug; 1 towel-rack; 2 tin chests for filing vouchers.

Tools and Property at Stable.

Five horses; 6 single harnesses; 1 set double harnesses; 5 stable blankets; 4 street blankets; 1 single truck; 1 2-horse truck; 4 sleighs; 4 wagons; 1 1-2 tons hay; 1 ton straw; 50 bushels oats; 4 forks; 2 brooms; 4 rubber covers; 2 shovels; 1 wolf-skin robe; 1 lap-robe; 2 mane brushes; 2 curry-combs; 2 horse brushes; 5 halters; 1 string bells; 1 light collar and harness; 2 chamois skins; 1 box harness soap; 2 carriage sponges; 2 harness sponges; 2 wagon jacks.

Gallery Gate House Tools.

One boat; 1 pair oars; 2 sets falls; 2 tug-ropes; 2 brooms; 1 gate-wrench; 1 fork-wrench; 1 T wrench; 1 square-head wrench; 1 pail and shovel; 1 oil-can; 1 dip-net; 1 ice-rake.

Inlet House Tools.

Seven shovels; 7 hoes; 1 pick; 1 gate-wrench; 1 ice-chisel; 2 rakes.

Superintendent's Office.

Two desks; 1 hat-tree; 1 case drawers and book-case.

REPORT OF THE ENGINEER.

OFFICE OF CITY ENGINEER,

LOWELL, MASS., Jan. 1, 1892.

To the Lowell Water Board:

GENTLEMEN:—The following is the Nineteenth Annual Report of the work done by the pumping engines of the Lowell Water Works:

The calculations of the duty of the engines were made from the records kept by the engineer in charge, Mr. James P. Roberts.

All the coal used at the Pumping Station has been charged to the pumping account, except $7\frac{14}{100}$ tons, which have been deducted on account of heating the new shop.

The Morris and Worthington engines have been run together one hundred and fifty-one days.

The Morris engine has been run two hundred and eighty-eight nights, and the Worthington engine one hundred and forty-two nights.

The new Worthington High Duty engine has pumped 4,446,306 gallons of water, and has been charged with $21\frac{1}{2}$ tons of coal, a portion of which has been used for heating the steam jackets, etc., when the engine was not running.

The cost of pumping one million gallons with the Worthington High Service engine, from the pipes under low service pressure at the Pumping Station, into the high service reservoir, is nine dollars and eighty-one cents, which added to the average cost of pumping one million gallons into the low service reservoir, makes the total cost of pumping into the high service reservoir sixteen dollars and eighty-seven cents per million gallons.

There have been 2,156,927,976 gallons of water pumped into the low service reservoir during the year, an increase over last year of 195,025,226 gallons.

A special trial to ascertain the amount of water per day (24 hours) that could be obtained through the 30-inch pipe conduit, 6655 feet long, was made April 17, 1891, with the following result:

Morris engine pumped	5,629,120 gallons.
Worthington engine pumped	3,392,640 gallons.
<hr/>	
Total	9,021,760 gallons.

During this trial a man was stationed at the inlet to keep the water up to the top of the overflow at the Bodwell gate-house so as to obtain the best possible results.

This trial proved that the statement in last year's report, "the greatest quantity pumped during one day by both engines was 10,045,660 gallons," could not be true.

This test was made in order to ascertain the quantity of water that would be available for testing the new 10,000,000 gallon Worthington engine. -

During the past summer 4337 feet of this 30 inch conduit has been duplicated, leaving only 2318 feet of the single line. This has reduced the friction so that a much larger supply can now be obtained than formerly.

Table Showing Work Done With Morris Engine (Beam and Fly Wheel) and Boilers for Each Month
During the Year 1891.

MONTHS.	No. of days pumping.	Av. No of hours pumping per day.	Number of hours pumping per month.	No. of strokes made per month.	Average No. of strokes made per minute.	Average head, including friction, in feet.	Quantity pumped per month, in U. S. gallons.	Average quantity pumped per day, in U. S. galls.	No. galls. of water raised into reservoir per lb. total coal consumed.	Duty in lbs., 1 foot high, with 100 lbs. coal, used in pumping only, no deduction for ashes or clinkers.	Duty on total coal consumed no deduction for ashes or clinkers.
January	25	23-31	588-00	423,790	12.01	164.92	135,612,800	5,424,512	557	91,638,213	76,578,509
February	23	23-31	541-00	396,225	12.21	164.52	126,792,000	5,512,696	555	90,875,979	76,147,947
March	27	23-32	635-30	472,548	12.39	163.86	151,215,360	5,600,569	573	93,608,848	72,220,125
April	25	22-46	569-15	424,381	12.43	164.10	135,801,920	5,432,077	577	94,180,522	78,897,182
May	24	23-13	557-20	408,395	12.21	164.79	130,686,400	5,445,267	562	92,706,340	77,162,286
June	23	23-01	529-30	377,824	11.89	165.46	120,903,680	5,256,682	590	98,767,386	81,326,500
July	27	22-16	601-00	431,638	11.97	165.82	138,124,160	5,115,709	604	101,818,852	83,473,923
August	26	23-00	598-00	430,092	11.99	165.75	137,629,440	5,293,440	594	99,277,205	82,052,585
September	22	21-17	468-15	336,723	11.99	165.56	107,751,360	4,897,789	586	98,133,909	80,888,389
October	22	22-54	503-45	366,929	12.14	164.19	117,417,280	5,337,149	581	96,788,578	79,460,444
November	24	23-27	563-00	409,303	12.12	163.57	130,976,960	5,457,373	589	97,300,711	80,245,759
December	26	22-53	595-00	434,668	12.18	163.57	139,093,760	5,349,760	583	96,054,489	79,535,037
Totals and averages	294	22-57	6749-35	4,912,516	12.13	164.72	1,572,005,120	5,346,956	579	95,814,955	79,456,364

Table Showing Work Done With Worthington Duplex Engine for each Month During the Year 1891.

MONTHS.	No. of days' pumping.	Av. No. of hours pumping per day.	Number of hours pumping per month.	Number of strokes made per month.	Av. No. of strokes per minute.	Average head, including friction, in feet.	Quantity pumped per month, in U. S. gallons.	Average quantity pumped per day, in U. S. galls.	No. galls. of water raised into reservoir per lb. of total coal consumed.	Duty in lbs. 1 foot high, with 100 lbs. coal, used in pumping only, no deduction for ashes or clinkers.	Duty on total coal consumed, no deduction for ashes or clinkers.
January	18	21-12	381-45	202,664	8.85	165.71	62,825,840	3,490,324	393	64,508,686	54,295,487
February	14	18-21	256-55	136,897	8.88	165.85	42,438,070	3,031,291	400	65,612,575	55,233,190
March	7	19-00	133-00	60,982	7.64	166.28	18,904,420	2,700,631	395	67,000,800	54,691,684
April	7	22-26	157-00	88,914	9.44	165.51	27,563,340	3,937,620	401	65,326,061	55,261,304
May	10	22-27	224-30	117,126	8.70	166.35	36,309,060	3,630,906	392	64,618,045	54,301,475
June	19	20-54	397-00	198,887	8.35	166.19	61,654,970	3,244,998	406	68,424,540	56,180,154
July	19	21-51	415-00	182,971	7.35	166.98	56,721,010	2,985,316	390	67,638,047	54,249,912
August	20	21-15	425-00	193,390	7.58	166.77	59,950,900	2,997,545	395	67,413,766	54,962,684
September	22	19-59	439-30	245,148	9.30	165.64	75,995,880	3,454,358	403	66,021,409	55,654,115
October	16	21-24	342-30	221,648	10.78	164.18	68,710,880	4,294,430	415	66,395,092	56,772,632
November	11	18-30	203-30	105,872	8.67	164.09	32,820,320	2,983,665	403	66,101,091	55,070,722
December	10	21-33	215-30	118,006	9.13	164.60	36,581,860	3,658,186	398	64,834,776	54,664,613
Totals and averages . .	173	20-45	3,591-10	1,872,505	8.69	165.77	580,476,550	3,355,356	400	66,276,369	55,234,114

Table Showing Amount of Coal Used for Morris Engine at Pumping Station During the Year 1891.

MONTHS.	COAL CONSUMED.			
	For starting fires, in lbs.	When pump- ing, in lbs.	For banking fires, in lbs.	Total per month, in lbs.
January.....	29,400	203,400	10,600	243,400
February.....	27,000	191,300	10,000	228,300
March.....	31,800	220,600	11,600	264,000
April.....	28,200	197,200	10,000	235,400
May.....	28,200	193,600	10,800	232,600
June.....	26,400	168,800	9,800	205,000
July.....	30,600	187,470	10,600	228,670
August.....	29,400	191,500	10,800	231,700
September.....	23,400	151,530	8,900	183,800
October.....	25,800	166,000	10,400	202,200
November.....	28,200	183,500	10,800	222,500
December.....	30,000	197,400	11,000	238,400
Totals.....	338,400	2,252,270	125,300	2,715,970

Table Showing Amount of Coal Used for Worthington Duplex Engine
at Pumping Station During the Year 1891.

MONTHS.	COAL CONSUMED.			
	For starting fires, in lbs.	When pump- ing, in lbs.	For banking fires, in lbs.	Total per month, in lbs.
January.....	18,900	134,500	6,400	159,800
February.....	12,600	89,400	4,200	106,200
March.....	6,600	39,100	2,200	47,900
April.....	7,800	58,200	2,800	68,800
May.....	11,100	77,900	3,700	92,700
June.....	20,400	124,800	6,800	152,000
July.....	21,600	116,700	7,200	145,500
August.....	21,000	123,600	7,000	151,600
September.....	22,200	158,900	7,400	188,500
October.....	18,000	141,600	6,000	165,600
November.....	10,200	67,900	3,400	81,500
December.....	10,800	77,400	3,600	91,800
Totals.....	181,200	1,210,000	60,700	1,451,900

Table Showing Work Done With Worthington High-Service Engine for Each Month During the Year 1891.

MONTHS.	No. of days' pumping.	Av. No. of hours pumping per day.	Number of hours pumping per month.	Number of strokes made per month.	Av. No. of strokes made per minute.	Av. head including friction, in feet.	Quantity pumped per month, in U. S. gallons.	Average quantity pumped per day, in U. S. gallons.	No. gals. water pumped into reservoir per lb. of total coal consumed	Coal in lbs., used when pumping.
January	5	17-42	88-30	173,544	32.68	78.67	2,429,616	485,923	328	7,400
February	4	15-26	61-45	128,937	34.80	78.67	1,805,118	451,279	301	5,990
March	5	16-12	81-00	171,543	35.30	78.67	2,401,602	480,320	308	7,800
April	4	19-04	76-15	159,551	34.87	78.67	2,233,714	558,428	319	7,000
May	6	15-30	93-00	198,716	35.61	78.67	2,782,024	463,671	302	9,200
June	6	16-37	99-40	220,593	36.89	78.67	3,088,302	514,717	318	9,700
July	8	14-08	113-00	245,466	36.20	78.67	3,436,524	429,565	312	11,000
August	7	14-08	99-00	205,968	34.67	78.67	2,883,552	411,936	307	9,380
September	7	15-13	106-30	216,094	33.82	78.67	3,025,316	432,188	306	9,900
October	5	15-36	78-00	168,366	35.98	78.67	2,357,124	471,425	306	7,700
November	5	14-00	70-00	150,011	35.72	78.67	2,103,154	420,031	311	6,750
December	7	12-50	89-50	185,608	34.44	78.67	2,598,512	371,216	312	8,320
Totals and averages	69	15-19	1,056-30	2,224,397	35.09	78.67	31,141,558	451,327	311	100,140

PUMPING STATION—Morris Engine.

RUNNING EXPENSES FOR THE YEAR 1891.

Pay of engineers and firemen.....	\$3,813.93
482 $\frac{699}{2000}$ tons coal (Pocahontas, 1890) at \$4,357.....	2,101.59
236 $\frac{1929}{2000}$ tons coal (Cumberland, 1891) at \$4,482.	1,062.07
638 $\frac{1342}{2000}$ tons coal (Cumberland, 1891) at \$4,330.....	2,765.44
Electric light.....	222.28
Gas for lighting works.....	46.01
151 $\frac{47}{100}$ gallons cylinder oil at 0.50.....	75.74
119 $\frac{24}{100}$ gallons machine oil at 0.25.....	29.81
33 pounds tallow at 0.05 $\frac{1}{2}$	1.81
220 pounds cotton waste at 0.12 $\frac{1}{3}$	27.13
36 pounds Eureka packing at 0.60.....	21.60
12 $\frac{3}{4}$ pounds rubber packing at 0.30.....	3.82
8 $\frac{1}{2}$ pounds Jenkins packing at 0.60.....	5.10
Repairs on engine.....	67.34
Repairs on boilers.....	86.48
Tools and stock.....	43.31
Sundries.....	31.83
Total.....	\$10,405.29

Cost of pumping water into reservoir, per million gallons...\$6.62

Cost of pumping water one foot high, per million gallons... 0.041 $\frac{2}{100}$

PUMPING STATION—Worthington Engine.

RUNNING EXPENSES FOR THE YEAR 1891.

Pay of engineers and firemen.....	\$1,410.63
178 $\frac{403}{2000}$ tons coal (Pocahontas, 1890) at \$4,357.....	776.42
87 $\frac{1091}{2000}$ tons coal (Cumberland, 1891) at \$4,482.....	392.38
460 $\frac{406}{2000}$ tons coal (Cumberland, 1891) at \$4,330.....	1,992.68
Electric light.....	82.22
Gas for lighting works.....	17.02

56 $\frac{3}{100}$ gallons cylinder oil at 0.50.....	28.01
44 $\frac{1}{100}$ gallons machine oil at 0.25.....	11.03
81 pounds cotton waste at 0.12 $\frac{1}{3}$	9.99
13 pounds Eureka packing at 0.60.....	7.80
Repairs on pump.....	7.68
Repairs on boiler.....	31.53
Tools and stock.....	16.02
Sundries.....	11 77
Total.....	\$4,795.18

Cost of pumping water into reservoir, per million gallons.. \$8.26

Cost of pumping water one foot high, per million gallons.. 0.04 $\frac{98}{100}$

Reservoir, Beacon Street, 1891.

MONTHS.	Depth in feet.	Quantity in U. S. gallons.	TEMPERATURE IN DEGREES.	
			Of water.	Of air.
January	18.75	28,413,234	32.29	29.03
February	18.44	27,896,680	32.25	30.78
March	18.17	27,449 543	33.38	33.18
April	18.27	27,621,884	46.11	50.43
May	18.63	28,221,906	55.40	58.61
June	18.02	27,207,287	67.19	68.79
July	18.81	28,521 514	71.32	72.02
August	19.08	28,967,966	72.87	72.72
September	18.72	28,373,016	68.10	66.58
October	19.06	28,934,547	57.59	51.18
November	19.37	29,456,429	42.18	40.58
December	18.66	28,270,397	35.77	37.97

Table showing the average monthly and daily consumption of water for the year 1891.

Average Monthly and Daily Consumption of Water for the year 1891.

MONTHS.	Gallons per month.	Gallons per day.
January.....	196,734.794	6,346,284
February.....	169,372,849	6,049,030
March.....	175,714.977	5,668,225
April.....	158,765,407	5,292,180
May.....	171,458,165	5,530,909
June.....	182,283,936	6,076,131
July.....	191,926,875	6,191,190
August.....	200,498,635	6,467,698
September.....	185,387.176	6,179,573
October.....	178,158,662	5,747,054
November.....	169,851.570	5,661,719
December.....	180,534,625	5,823,698
Totals and average.....	2,160,687.671	5,919,692

DRIVEN WELLS.

In accordance with a vote of the Water Board, passed August 3, 1891, I, in company with Delbert L. Barker, of Providence, R. I., located six wells on the Boulevard property in such places as seemed most suitable for testing the water yield of that vicinity. The wells were made by three-inch wrought iron pipes with open ends, and were driven by the hydraulic-jet process. The process is as follows: At the upper end of a pipe 19 feet in length is attached a hose-pipe, which is connected with a powerful pump, which forces water through the pipe into the earth. As the jet of water clears the way, the pipe is dropped to follow, the water and excavated material coming to the surface outside the pipe.

When a length of pipe, as stated 19 feet in length, has been driven into the earth, a second length is coupled to it and the process is continued until rock is reached. Then the pipe is pulled up some six inches or more, to allow the water to enter the pipe at its lower end. This done, the well is pumped for several hours, or until the water is clear. The capacity as well as quality is then tested.

In our work samples of the earth washed up by the water have been preserved, and the depth at which the same were taken noted.

After six wells had been driven a seventh was

sunk about twenty-five feet west of Well No. 4 (see accompanying diagram) to ascertain if Well No. 7 would take the water from No. 4. When the pump was applied no difference in yield from Well No. 4 was seen. The full results obtained from the seven Barker wells are given in Table I. The results show conclusively that the stratification in this locality is too fine for the use of open end wells; hence the Barker method was abandoned.

During the progress of the Barker work, Charles D. Pierce, of the Pierce Artesian & Oil Well Supply Company of New York city, came to Lowell at his own prompting and explained the advantages of using screens of suitable construction, claiming that large quantities of water could be obtained in sand and gravel of the character shown by samples from the Barker wells.

Accordingly, authorized by you, on October 13, Mr. Pierce began driving three-inch screen wells at the same locality used in the Barker experiment. The Pierce method is described as follows: The pipe, with a suitable screen attached, and with a steel shoe at the end of screen, is driven a short distance by means of a 150-pound drop hammer; the earth is then removed from the inside of the pipe by washing with a wash-pipe connected with a force-pump. This operation is repeated for every five feet driven. In each case a Pierce well was located near a Barker well, the screens being driven

to a depth corresponding with the best water-bearing strata as shown by the Barker borings.

At the conclusion of the Pierce well driving work, the Pierce wells were subjected to a test of capacity. One of the Fire Department steam fire engines was brought into service and each well was pumped one day, the discharge being accurately measured every fifteen minutes. The measure of water from all the wells increased as the pumping continued, and gave far better results at the end of a day's pumping than at the commencement in the morning. As soon as the pump was stopped the depth of water was noted, and no difference could be detected from the height at the starting of the pump. The full result of the Pierce work is shown by Table II, and the relative location of both the Barker and Pierce wells is shown upon the diagram which accompanies this report.

WATER ANALYSIS.

Samples from the Barker wells No. 1 and No. 4 were sent to William P. Atwood, chemist, for chemical analysis, and his findings are returned to me as follows:

George Bowers, City Engineer:

DEAR SIR:—I have examined two samples of water from the Boulevard wells, delivered to me September 12, 1891, and submit the following report:

Table Showing Results of Seven Wells Sunk by Delbert L. Barker.

WELL NO.	WHEN DRIVEN. 1891.	LAYERS IN FEET AND INCHES								Temp. of water in river. Deg.	Temp. of water in well. Deg.	Water in pipe be- low surface. Ft.	Well pumped, in hours.	Depth of well. Ft.	YIELD.		SAMPLE.		REMARKS.
		River silt.	Sand.	Dark quicksand.	Grey quicksand.	Clay.	Clay and gravel.	Fine gravel.	Course gravel.						Per minute. Gallons.	Per day. Gallons.	Color.	Taste.	
1	Aug. 29.	10				5		1	5	68	53	5-2	13	21	40	57,600	Iron.	Bad.	Iron, and veget- able matter.
2	Sept. 2.	8							12-5	63	57	6	5	53-5	3	4,320	Smoky.	Good.	
3	Sept. 5.	15	11		36	9			5-5	69	57	1-2	5	67-5	10	14,400	Clear.	Good.	
4	Sept. 10.	20		24	22				6-8	69	52	1-4	8	72-8	30	43,200	Clear.	Good.	
5	Sept. 14.	25	15	7	38				5-3	68	52	4	10	90-3	15	21,600	Clear.	Iron.	
6	Sept. 17.	20	20		36-8									76-8					Worthless.
7	Sept. 23.	28	2		34				5-5	68	53	4	10	69-5	9½	13,680	Clear.	Good	

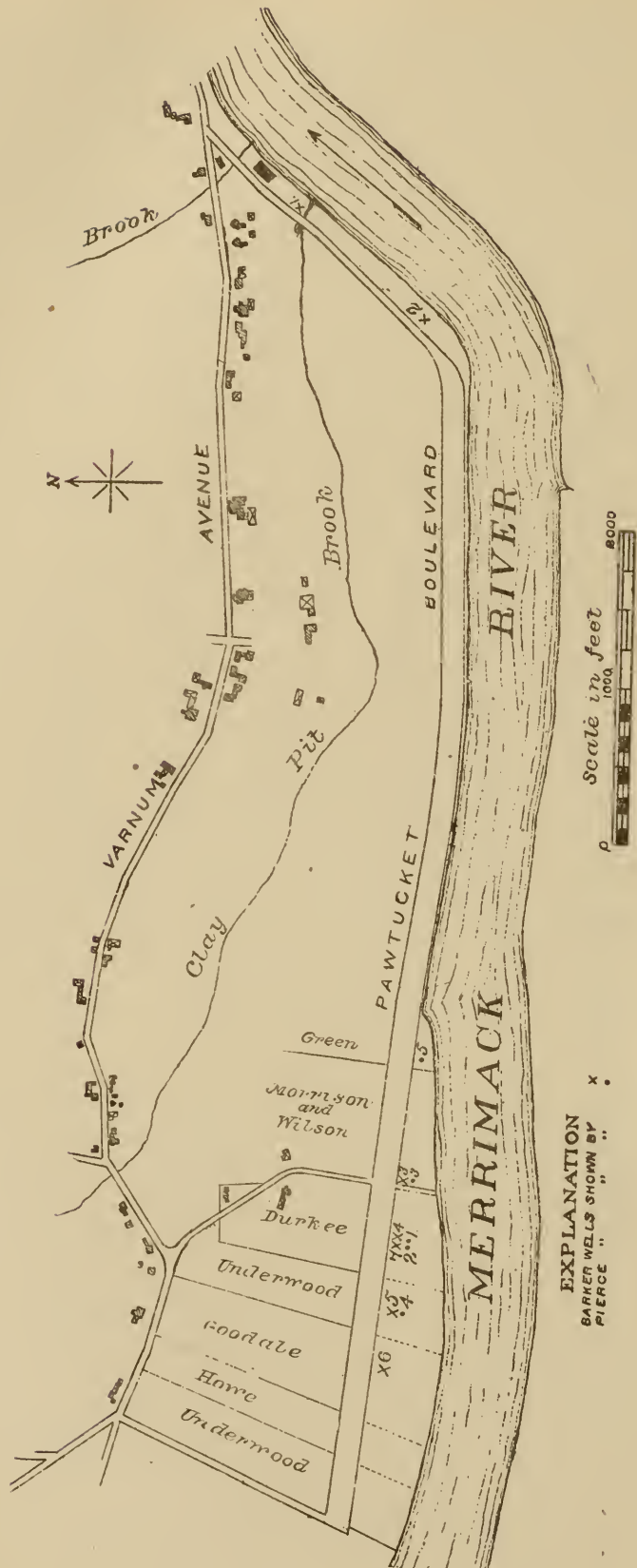


Table Showing Results of Five Wells Driven by Pierce Artesian and Oil Well Supply Company

WELL NO.	WHEN DRIVEN. 1891.	LAYERS IN FEET AND INCHES.				Sand chamber. Ft.	Strainer. Ft.	Depth of well. Ft.	Temp. of water in well. Deg.	Temp. of water in river. Deg.	Water in pipe be- low surface. Ft.	Well pumped, in hours.	YIELD.		SAMPLE.		REMARKS.
		River silt.	Sand.	Quicksand.	Gravel.								Per minute. Gallons.	Per day. Gallons.	Color.	Taste.	
1	Oct. 16.	20	12		3-4½		5-1½	68-4½	55		2	6¼	59	84,960	Clear.	Good.	Worthless.
2	Oct. 17.	20	12				10	29-1	50	53	3	7½	51	73,440	Clear.	Good.	
3	Oct. 21.	19-6	10-6			1-8	5-9	26-10	50	41	3-11	6¾	64	92,160	Clear.	Good.	
4	Oct. 23.	23-6	12			1-9	10	36-2	48				50	72,000	Trace of iron.	Good.	
5	Oct. 27.	11	9				10	20	46	38	9	4				Good.	

Chemical Examination of Water From Wells Near Pawtucket Boulevard, Driven by Delbert L. Barker. (Parts per 100,000.)

Well Number.	APPEARANCE.		Odor.	RESIDUE OF EVAPORATION.			AMMONIA.		Chlorine.	Nitrates.	Hardness.
	Turbidity.	Color.		Total.	Loss on ignition.	Fixed.	Free.	Albuminoid.			
1	Marked, greyish, large red; flocculent.	Not determined.	Slight, earthy.	14.1	1.1	13.0	0.08	0.0096			4.9
1 filtered	None.	None.	Slight, earthy.	9.0	0.8	8.2	0.08	0.0048	0.66	0.004	4.5
4	Sediment slight, earthy.	None.	Very slight, earthy.	11.1	0.1	11.0	0.0008	0.0003	0.64	0.003	4.8

Water from Well No. 4 gives a very satisfactory analysis, and leaves little to be desired from a chemical standpoint.

Water from Well No. 1 is so different from that of No. 4 as to call for some additional comment.

This water when first drawn was clear; but in the course of two or three hours it deposited a red flocculent precipitate. This consists almost wholly of hydrated ferric oxide.

The iron composing this sediment existed previous to its precipitation in the state of ferrous carbonate, held in solution by the free carbonic acid of the water; when the water was exposed to the air, oxidation took place and the iron was precipitated as stated above.

When the clear water filtered from the red sediment is boiled and all the carbonic acid driven off, there is a slight additional precipitate formed.

This consists of ferric oxide and a small amount of oxide of manganese.

The presence of so much iron in the water renders it unfit for ordinary use. The large amount of free ammonia would indicate that the water has been in contact with decomposing vegetable matter.

Respectfully submitted,

WILLIAM P. ATWOOD,

Chemist.

Samples from the Pierce wells were taken for chemical analysis December 2, 1891, and sent to Mr. Atwood, and later I received the following report:

George Bowers, City Engineer:

DEAR SIR:—I have examined four samples of water received from the City Engineer, December 2, 1891, and submit the following report:

Chemical Examination of Water from Wells near Pawtucket Boulevard Driven by Pierce Artesian and Oil Well Supply Company. (Parts per 100,000.)

Well Number.	APPEARANCE.		Odor.	RESIDUE OF EVAPORATION.			AMMONIA.		Chlorine.	Nitrates.	Hardness.
	Turbidity.	Color.		Total.	Loss on ignition.	Fixed.	Free.	Albuminoid.			
2.	Greyish; large; sandy.	None.	Very slight earthy.	3.8	0.1	3.7	0.0008	0.0032	0.26	0.016	2.1
2 filtered.							0.0008	0.0028			
3.	None.	None.	None.	6.5	0.5	6.0	0.0007	0.0011	0.47	0.20	3.3
4.	Slightly sandy.	None.	Very slight earthy.	7.7	1.9	5.8	0.0008	0.0015	0.95	0.26	4.3
5.	Slightly grayish. Largely sandy.	0.18	Very slight earthy.	2.8	0.3	2.5	0.0008	0.0048	0.32	0.016	1.4
5 filtered.		0.12					0.0009	0.0046			

Sediment of sand is not included in the analysis.
The filtering was through filter paper.

I consider the above safe to use, and better than city water.

You will notice that the nitrates are highest in Pierce's No. 3 and No. 4, and also that in these samples the ammonias are the lowest and the chlorines above the normal. This would indicate that these waters have received organic impurities, which have been destroyed by nitrification during the filtration of the water through the earth in which the wells were sunk. In Pierce's No. 2 and No. 5 the chlorines are nearly normal, the nitrification not so complete as shown by the higher ammonias and the color in the latter (No. 5).

Respectfully submitted,

WILLIAM P. ATWOOD

Chemist.

It will be noticed by an examination of the foregoing analyses that the only objectionable water examined was the sample taken from a well located very near the present filter gallery.

BIOLOGICAL EXAMINATION.

Samples taken from the wells by the State Board of Health for the purpose of making a biological examination, show results not wholly looked for by the experts. In fact it may be said that the results shown were entirely unsatisfactory to Professor Sedgwick, so much so that he is at the present time engaged upon the same work, taking the samples and conducting the work himself. The following is the biological report upon the first samples taken:

STATE BOARD OF HEALTH,
CHIEF ENGINEER'S OFFICE,
13 BEACON STREET,
BOSTON, MASS., Dec. 8, 1891.

Mr. George Bowers, City Engineer, Lowell, Mass.:

DEAR SIR:—I send herewith the numbers of bacteria per cubic centimeter found in the samples of water taken by Mr. Fales from the Lowell driven wells on December 2.

Name.		Bacteria per c. c. in sample from pump.									
Pierce well	No. 2	.	.	.	.	.	.	.	.	.	liquified.
"	"	"	3	.	.	.	.	.	.	.	4
"	"	"	4	.	.	.	.	.	.	.	106
"	"	"	5	(20 feet deep)	.	.	.	.	.	.	29
Barker	"	"	4	(72 feet deep)	.	.	.	.	.	.	52

Yours truly,

F. P. STEARNS,

Chief Engineer.

The results, as a whole, from these trial wells were sufficiently satisfactory for the Board to see fit to authorize me to continue the work, employing Water Works men and tools, and purchasing all necessary pipe and fittings. I went to Boston for the purpose of purchasing supplies, but was unable to find suitable screens and fittings in stock, hence postponed doing well work by means of our own facilities for the present.

Soon after the steam pumping test, William D. Andrews, of William D. Andrews & Brother of New York city, a gentleman who has had great experience and success with driven wells at Brooklyn and other localities, having heard that Lowell was investigating the subject of driven wells, called upon

me. I showed him the samples of earth from the Barker wells, and went with him to the Boulevard and several other places that seemed to be available for well driving purposes. He was of the opinion that ten million gallons per day (24 hours) could be obtained from two or three locations; that is, about five millions from the Boulevard and five millions from Beaver Brook locality. After this examination he was and is willing to contract and guarantee that amount, and as I understand has made your body a formal proposition to that effect.

At Foxboro, Mass., where Andrews & Brother have recently furnished a water supply from driven wells, the people are very enthusiastic following results obtained. At Foxboro it was contracted to furnish five hundred gallons per minute, and at the time of the visit of myself with the Water Board, they were pumping that amount from fifteen wells, although the contractors had driven twenty-four.

Frank R. Johnson of the "Hydraulic Tube Well Construction Co." of New York city was our next well advocating visitor. This gentleman was taken to the places shown Mr. Andrews, and he, too, was willing to contract to furnish ten millions of gallons of water per day, and also to make stratification tests to find the amount of water that these places could be relied upon to yield. He also, as I understand, has submitted to you a proposition to build complete a plant capable of yielding ten million gallons of water.

Both Mr. Andrews & Brother and Mr. Johnson's people are willing to enter into a contract to furnish the city with water at a price per million gallons, they to furnish all the material, drive the wells and make all the connections; also collect the water into a receiver at any one location.

As a result of the experimental well work of 1891, I fully agree with Professor Sedgwick, who firmly believes in continuing work in this same direction, as in his judgment the information already obtained has warranted the expenditure made. Our highest authorities are also believers in underground water supplies for cities. Nothing thus far has been brought out by our own investigations that is in any way discouraging to the general idea of abandonment of the Merrimack River as a source of supply, and the introduction in its stead of water obtained from driven wells.

ANALYSIS OF MERRIMACK RIVER WATER, BY THE STATE
BOARD OF HEALTH.

Samples of water have been taken each month from the middle of the Merrimack River above Pawtucket Falls, opposite the inlet pipe, and sent to the State Board of Health for analysis. Besides the regular examinations made by the State Board of Health, two sets of samples, one from the middle of the north half of the stream, and one from the middle of the south half of the river, opposite the

inlet pipe, were taken during the months of October and November, when the water of the river was unusually low.

The results of these analyses are in the hands of the State Board of Health.

Respectfully submitted,

GEORGE BOWERS.

City Engineer.

ANNUAL REPORT
OF THE
OVERSEERS OF THE POOR,
WITH ACCOMPANYING PAPERS,
OF THE
CITY OF LOWELL,
FOR THE YEAR 1891.



LOWELL, MASS.
COURIER PRESS: MARDEN & ROWELL.
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, Feb. 16, 1892.

Received and ordered on file. Sent down for concurrence.

MICHAEL J. DOWD,

City Clerk.

IN COMMON COUNCIL, Feb. 23, 1892.

Received and ordered on file in concurrence.

DAVID CHASE,

Clerk

REPORT OF THE SECRETARY

OF THE

OVERSEERS OF THE POOR.

LOWELL, Jan. 30, 1892.

To the Board of Overseers of the Poor.

GENTLEMEN:—I have the honor to submit the following report of the administration of the Secretary's office for the year 1891.

TEMPORARY AID.

During the year temporary aid, consisting of wood, coal, provisions, and orders, has been given to 540 families, comprising 1,617 persons, 737 males and 880 females. Of this number 527 were state paupers, and 193 were paupers of other cities and towns, leaving 897 persons aided who have a settlement in Lowell.

The value of above aid was \$5,119.52. Of this amount \$808.54 was reimbursed by the commonwealth, and cities and towns, leaving \$4,310.98 as the net amount expended for our own poor as partial support at their homes. In addition to above the sum of \$1,933.17 has been paid as cash allowances, making a total of \$6,244.15 expended for paupers of Lowell under this head.

SOLDIERS' RELIEF.

By your direction a separate account has been kept of amount allowed to veterans, their wives, widows, and minor children, under chapter 447, Acts of 1890, as follows:—

Number of persons assisted, 99; 62 had a settlement in Lowell, 37 in other cities and towns. Total amount allowed to above in cash, orders, and medicine was \$1,865.20; reimbursed \$679.85, leaving \$1,185.35 as the amount allowed to Lowell cases.

HOSPITALS.

The number received at the hospitals for whose board and care this department was responsible, was: at St. John's Hospital 204, at Lowell Hospital 8; total 212, 48 more than in 1890. Of this number 116 were state paupers, 19 were chargeable to cities and towns, and 77 had a settlement in Lowell. Total amount paid for care of above was \$4,419.83; amount reimbursed \$2,521.02; leaving \$1,898.81 as the net expense to the city.

INSANE.

Seventy-five persons were cared for at the state lunatic hospitals at the expense of the city. Of this number 30 have been cured, died, or transferred to our institution, leaving 45 now at the hospitals on expense to the city. Total amount paid for care of above was \$7,734.59.

STATE PAUPERS.

One hundred and fifty-one paupers were sent to the State Almshouse at Tewksbury, 15 more than in the year 1890.

BURIALS.

One hundred and twenty-six orders for burial of deceased paupers were given by this department during the year, 19 more than in 1890.

CRIMINALS.

The sum of \$93.14 was paid to Middlesex County for board of criminals at the House of Correction who have a settlement in Lowell.

AMBULANCE.

Five hundred and forty-two calls were made with the ambulance, 209 more than during the year 1890, divided as follows: sick 328, accident 144, not used 70.

A new shed for the ambulances has been erected during the year at a cost of \$300.

WOOD YARD.

Two hundred and ninety-six cords of wood and 111 tons of coal have been delivered to paupers, schools, etc., during the year, 145 cords more and 10 tons more than in 1890.

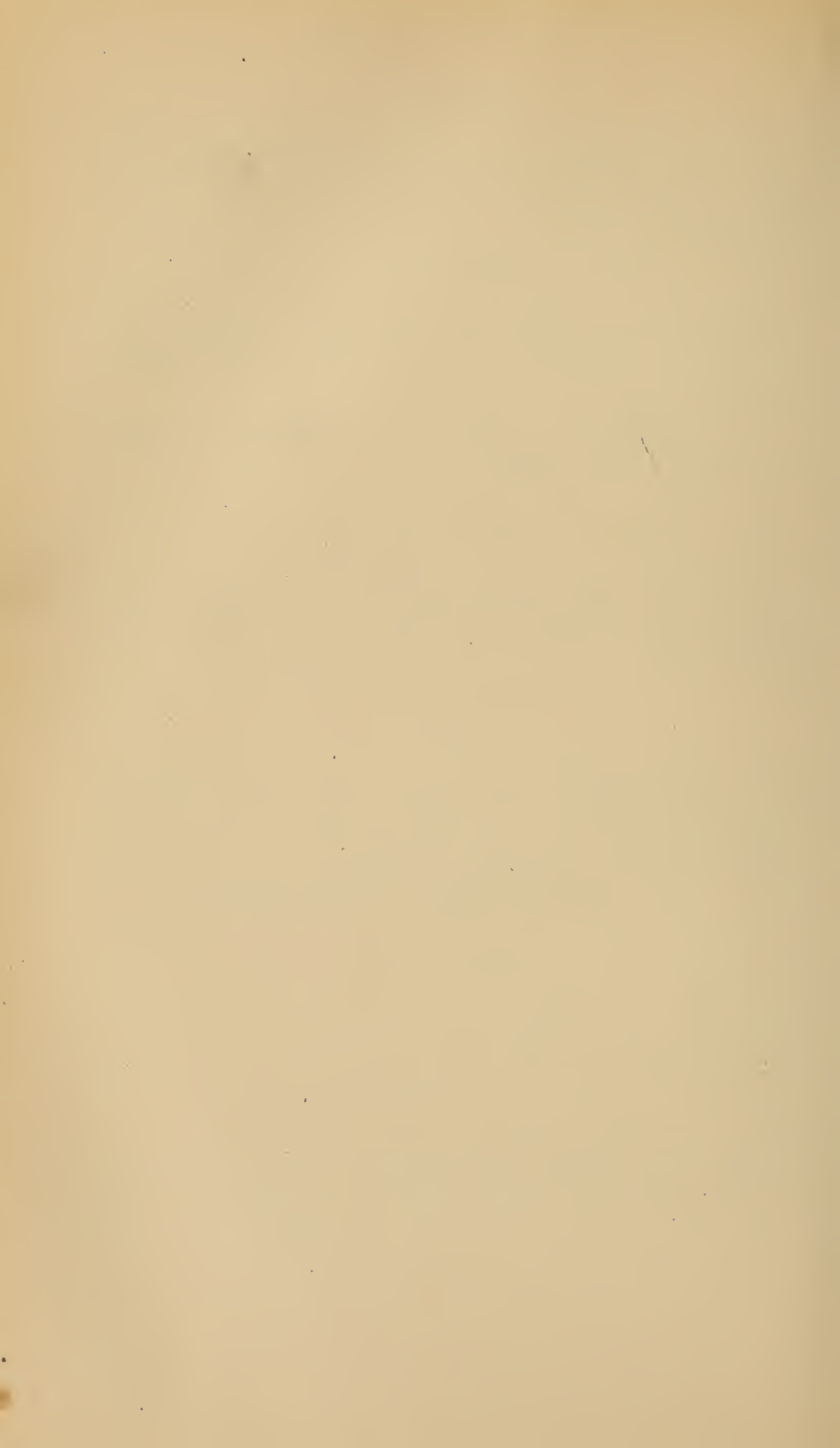
DISPENSARY.

For the number of prescriptions and detailed work at the dispensary I would refer you to the report of the dispensary physicians.

Respectfully submitted,

CHAS. H. RICHARDSON,

Secretary.



REPORT OF INSTITUTIONS
AT
CITY FARM, LOWELL,
FOR THE YEAR 1891.



SUPERINTENDENT'S REPORT.

OFFICE OF THE SUPERINTENDENT AT CITY FARM,

LOWELL, Dec. 20, 1891.

GENTLEMEN:—I have the honor to submit my report for the year 1891.

ALMSHOUSE.

The number of inmates in the almshouse Dec. 20, 1890, was two hundred and forty-six (246), one hundred and two males (102) and one hundred and forty-four females (144). During the year there were admitted three hundred and sixty-eight (368), one hundred and seventy-three males (173) and one hundred and ninety-five females (195), making the whole number for the year six hundred and fourteen (614). Of this number there were discharged three hundred and forty-three (343), one hundred and sixty-four males (164) and one hundred and seventy-nine females (179), leaving the number remaining Dec. 20, 1891, two hundred and seventy-one (271), one hundred and eleven males (111) and one hundred and sixty females (160). Average number supported for the year was two hundred and fifty-nine (259). There were nine births in the almshouse during the year, seven males (7) and two females (2). The number who died at the institutions during the year was thirty-four (34), fourteen males (14) and twenty females (20).

WORK-HOUSE.

The number of inmates Dec. 20, 1890, was fifty-seven (57), nineteen males (19) and thirty-eight females (38). The number committed during the year was two hundred and seventy-two (272), one hundred and thirty-nine males (139) and one hundred and thirty-three females (133), making the whole number for the year three hundred and twenty-nine (329), one hundred and fifty-eight males (158) and one hundred and seventy-one females (171). Of this number there were discharged during the year one hundred and ninety-two (192), leaving the number remaining Dec. 20, 1891, one hundred and thirty-seven (137). The average number supported for the year was eighty-one (81). Offence for which convicted: drunkenness, one hundred and fifty-two (152); second offence, thirty-eight (38); third offence, thirty (30); common drunkards, thirty-six (36); larceny, nine (9); vagrants, two (2); keeping liquor, one (1); liquor nuisance, two (2); embezzlement, two (2); total, two hundred and seventy-two (272).

INSANE.

The number remaining Dec. 20, 1890, was seventy-five (75), twenty-three males (23) and fifty-two females (52). During the year there were admitted forty-seven (47), twenty-four males (24) and twenty-three females (23), making the whole number for the year one hundred and twenty-two (122). The number remaining Dec. 20, 1891, was eighty-four (84), twenty-nine males (29) and fifty-five females (55).

EXPENDITURES.

The average number supported in the almshouse was two hundred and fifty-nine (259), in the workhouse eighty-one (81), in the reformatory forty-three (43); total average, three

hundred and eighty-three (383). The number whose board was paid was fifteen (15); the actual average was three hundred and sixty-eight (368). The amount of bills paid for all expenses was forty-two thousand one hundred and eighty-four dollars and one cent (\$42,184.01); credits for the year were eight thousand nine hundred and seventy-two dollars and twenty-seven cents (\$8,972.27). The net expense was thirty-three thousand two hundred and eleven dollars and seventy-four cents (\$33,211.74), a yearly cost of ninety-four dollars and twenty-five cents (\$94.25), or a weekly cost of one dollar and seventy-four cents (\$1.74).

I close this report, thanking the members of the board for their kindness and support which I have received at their hands. I wish, also, to thank the officers of the institutions.

Respectfully submitted,

ALBERT PINDER,

Superintendent.

REPORT OF
TEACHER AND CHAPLAIN
OF
INSTITUTIONS, CITY FARM.

1891.

TEACHER'S REPORT.

*Gentlemen of the Board of Overseers of City Institutions,
City of Lowell:—*

I herewith present for your examination our annual report
of school-work for the year 1891:—

Whole number of pupils instructed.....	159
Pupils attending school Jan. 1, 1891.....	60
Males under sentence.....	41
Females under sentence.....	1
Males not under sentence.....	10
Females not under sentence.....	8

Average monthly attendance.....	57	1-2
Average age under sentence.....	11	1-2
Average age not under sentence.....	8	1-3
Highest number for any one month (March).....	70	
Lowest number for any one month (August).....	41	
Admitted on sentence.....	55	
Males.....	55	
Females.....	0	
Discharged by expiration of sentence.....	50	
Probation.....	6	
Number remaining sentenced.....	41	
Whole number attending school at present time.....	59	
Males under sentence.....	41	
Females under sentence.....	0	
Males not under sentence.....	10	
Females not under sentence.....	8	

NAMES OF CITIES AND TOWNS THAT HAVE MADE ARRANGEMENTS WITH THE OVERSEERS OF THE POOR TO SEND JUVENILE OFFENDERS TO OUR SCHOOL.

Lowell	39
Arlington	2
Chelsea	5
Waltham	2
Winchester	0
Stoneham	0
Everett	0
Medford	0
Marlboro	0
Somerville	1
Lincoln	0
Wakefield	0
Malden	3
Fitchburg	0
Clinton	1
Woburn	0
Wilmington	0
Hopedale	0
Ayer	0
Watertown	2

COMMITTED FOR THE FOLLOWING OFFENCES.

Truancy	50
Larceny	4
Vagrancy	1

NUMBER OF TIMES COMMITTED.

For the first time	42
For the second time	8
For the third time	4
For the fourth time	1

BIRTHPLACE OF THOSE UNDER SENTENCE.

United States	49
Ireland	1
England	4
Canada	1

Classification of school under my supervision is as follows:—

DEVOTIONAL EXERCISES.

Morning Prayer.

IN SPELLING.

In Spelling and Defining, three classes.....	32
Worcester's Spelling-book, two classes.....	22
First class.....	8
Second class.....	14

IN READING.

Franklin Fifth Reader.....	6
New Franklin Fourth Reader.....	10
New Franklin Third Reader.....	21

READ IN HISTORY.

Higginson's History of the United States.....	8
Child's History of the United States.....	28

IN ARITHMETIC.

Bradbury's Eaton's Arithmetic, two classes.....	22
Thompson's Intellectual Arithmetic, three classes.....	32
In Geography, three classes.....	34
In Drawing, one class.....	30
In Writing, one class.....	36
In Grammar, one class.....	9

STUDY HISTORY.

Higginson's History of the United States.....	8
Child's History of the United States.....	28

Classification of department taught by my assistant, Mr. Octave L. Gaudette.

IN READING.

Franklin Third Reader.....	7
Franklin Second Reader.....	5
Franklin First Reader.....	7
Franklin Primer.....	4
Monro's Chart.....	5

In Geography.....	6
In Arithmetic.....	8
In Drawing and Writing.....	14

DIVISION OF THE TWENTY-FOUR HOURS OF THE DAY.

Rise fall and winter months at.....	6 a. m.
Rise spring and summer months at.....	5 a. m.
Morning Prayer at.....	6.15 a. m.
Breakfast fall and winter months at.....	6.30 a. m.
Breakfast spring and summer months at.....	5.30 a. m.
• Recess.....	
School from.....	8.30 to 11.30 a. m.
Recess.....	
Dinner	12 m.
Recess.....	
School from.....	1.30 to 3.30 p. m.
Recreation.....	
Supper followed by recess.....	5.30 p. m.
Evening Prayer and hour for retiring.....	7.15 p. m.

On Sabbaths religious services have been held regularly during the year.

Catholic service every Sunday morning from 8 to 9 o'clock. Mass the third Sunday of each month.

Protestant general service from 2 to 3 o'clock p. m., followed by Sunday School for Protestant children.

Many of the boys have shown a good interest in their studies and have made improvement.

I offer my heartfelt thanks to the Board of Overseers and to the Superintendent and wife for their kind assistance in the discharge of my duties.

May He who is mighty to save abide with us.

Respectfully submitted,

WM. A. LANG,

Teacher and Chaplain.

ANNUAL REPORT
OF THE
CITY DISPENSARY,
1891.

SECRETARY'S REPORT.

LOWELL, Jan. 1, 1892.

To the Overseers of the Poor.

GENTLEMEN:—The physicians of the City Dispensary present to you their report for the year 1891.

The Dispensary staff, consisting of twelve physicians, who were appointed by your board, are as follows: Drs. Colton, Willard, Ricker, Viles, Eaton, W. A. Johnson, McOwen, Gillard, Halpin, Spaulding, Patterson and Frye. Drs. Willard and Patterson resigned during the year, and there are two vacancies on the staff at present.

The staff have attended to their duties faithfully and well during the past year.

The whole number of patients treated at the Dispensary during the year was four hundred and fifty-five (455); males, one hundred and seventy-eight (178); females, two hundred and seventy-seven (277).

Diagnosis was given in four hundred and forty-two (442) cases.

The following table will show you the diseases and number of each which were treated during the past year:—

Abscess Mastoid.....	1
Alcoholism.....	2
Abscess.....	8
Amenorrhœa.....	2
Anæmia.....	1
Asthma.....	2
Bronchitis.....	78
Angina Pectoris.....	1

Catarrh	3
Chorea	1
Constipation.....	6
Cephalgia	1
Cystitis.....	1
Contusions.....	32
Debility	12
Conjunctivitis	5
Diagnosis not made.....	13
Diarrhœa	13
Dysentery	3
Dyspepsia.....	3
Dislocations.....	5
Eczema	24
Erysipelas	2
Epilepsy.....	1
Foruncle.....	2
Fracture Radius.....	1
Fistula	1
Gonorrhœa.....	8
Hernia	2
Hæmorrhoids.....	1
Hæmopysis	1
Intestinal Worms.....	4
Insomnia	1
Iritis	1
Leucorrhœa.....	1
La Grippe.....	4
Lumbago	1
Liver, Disease of.....	1
Malingerer	1
Neuralgia	8
Pneumonia.....	1
Pneumonia, C. C.....	1
Poison Ivy.....	1
Paralysis.....	2
Pleurisy	2
Phthisis	12
Paraphimosis.....	4
Paranychia.....	1

Poison Lead.....	2
Rheumatism.....	28
Syphilis.....	9
Sprain.....	4
Scrofula.....	2
Scabies.....	23
Stone in Bladder.....	1
Stricture.....	1
Sciatica.....	1
Scald.....	1
Teeth Extracted.....	4
Tonsillitis.....	8
Ulcer.....	7
Ulcer Varicose.....	8
Uterus, Disease of.....	2
Urine, Incontinence of.....	1
Urine, Suppression of.....	1
Venereal Warts.....	1
Vertigo.....	1
Wounds.....	2
Wounds Incised.....	2

The whole number of prescriptions filled at the Dispensary was 11,470, and the following table will show the growth of this department each year up to the present time:—

1880.....	3,585	prescriptions
1881.....	4,870	“
1882.....	4,027	“
1883.....	5,562	“
1884.....	5,806	“
1885.....	8,190	“
1886.....	4,486	“
1887.....	6,720	“
1888.....	7,185	“
1889.....	7,837	“
1890.....	7,084	“
1891.....	11,470	“

The number of patients treated at the Dispensary was two hundred less than in 1890, while the Dispensing Department

increased about sixty per cent., which is accounted for by the increasing duties of the Ward Physicians, who treated the patients at their homes.

The nativity of the patients was as follows:—

Ireland	206
England	40
Massachusetts.....	23
Canada.....	8
Connecticut	2
New Hampshire.....	9
Vermont	4
New York.....	9
Maine	5
New Jersey.....	1
California.....	2
Nova Scotia.....	4
Scotland.....	8
Belgium.....	2
Russia.....	1
Wales.....	2
Poland.....	1
Armenia	1
Unknown.....	9
Lowell	117

We would extend to your honorable board our thanks for the many favors received, and also to Mr. Sheehan, the drug clerk, for his uniform kindness during the past year.

Respectfully submitted,

CHAS. H. RICKER,

Secretary.

ANNUAL REPORT
OF THE
Births, Marriages and Deaths
OF THE
CITY OF LOWELL,
FOR THE YEAR 1891.



LOWELL, MASS.,
MORNING MAIL PRINT, NO. 147 CENTRAL STREET,
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, March 15, 1892.

Received and ordered on file, sent down for concurrence.

. MICHAEL J. DOWD, *City Clerk*.

IN COMMON COUNCIL, March 30, 1892.

Received and ordered on file, in concurrence.

DAVID CHASE, *Clerk*.

REPORT OF THE CITY CLERK.

CITY OF LOWELL,
CITY CLERK'S OFFICE, March 15, 1892. }

To the City Council:

GENTLEMEN — I have the honor to present the Annual Report of Births, Marriages and Deaths for the City of Lowell, for the year 1891.

BIRTHS.

The total number of births returned and recorded for the year 1891 was 2,203; males, 1,146; females, 1,107, an increase over the number returned and recorded in 1890 of 28, an increase of 39 in the number of males and a decrease of 11 in the number of females. Of the entire number returned and recorded, 35 were born elsewhere than in Lowell, but were found by our enumerators and returned according to law. There were also returned the names of 5 children who were born of Lowell parents residing temporarily out of town.

Number of Births, Parentage, Etc., by Wards.

WARDS.	One.	Two.	Three.	Four.	Five.	Six.	Total.
Whole No.	339	244	447	255	637	281	2203
Males	172	128	228	138	326	154	1146
Females	167	116	219	117	311	127	1157
Born of American parents . .	25	29	99	72	64	49	338
Born of Foreign parents . .	263	162	243	155	484	166	1473
American father and Foreign mother	36	26	43	17	33	30	185
Foreign father and American mother	15	24	56	10	55	30	190
Parents nationality unknown .	....	3	6	1	1	6	17
Twins	2	5	1	1	7	4	20
Illegitimate . . . . .	....	..	4	....	1	3	8

MARRIAGES.

Nine hundred and seventy-three intentions of marriage were recorded, and certificates issued in 1891, a decrease of ten from the figures of 1890.

The total number of marriages returned and recorded for the year 1891, nine hundred and eighty-seven, an increase of eight over 1890. Of this number nine hundred and forty-four were solemnized in Lowell, and forty-three elsewhere.

Total number of marriages in each month in 1891 :

January,	89	May,	71	September,	114
February,	82	June,	104	October,	109
March,	52	July,	53	November,	116
April,	66	August,	75	December,	56

Oldest person married, 70 ; youngest person married, 16 ; oldest couple married, 70-67 ; youngest couple married, 18-18.

Nationality of Contracting Parties:

	Grooms.	Brides.
United States	404	389
Canada	242	257
Ireland	170	186
England	78	50
British Provinces	54	64
Scotland	16	22
Sweden	9	10
Other countries	14	9

DEATHS.

The total number of deaths recorded in 1891 was 1,976, an increase of 16 over 1890.

Total number of males, 953.

Total number of females, 1,023.

The age of the oldest person who died was 95 years.

In the reports of the City Physician and Superintendent of Burials may be found all other desired information regarding cause of death, percentage of mortality, etc.

Copies of the record of births, marriages and deaths, have been forwarded to the Secretary of the Commonwealth, as required by law.

Respectfully submitted,

MICHAEL J. DOWD,

City Clerk.

Table giving the Population and number of Births Marriages, and Deaths recorded in Lowell since its incorporation.

	Population.	Births.	Marriages.	Deaths.
1826-1843.....	.....	est. 5,010	est. 4,500	4,186
1844.....	25,163	662	319	362
1845.....	.....	660	319	363
1846.....	29,127	772	291	690
1847.....	.....	719	659	949
1848.....	.....	796	516	825
1849.....	.....	672	320	903
1850.....	33,383	966	674	492
1851.....	.....	1,018	669	629
1852.....	.....	1,007	669	604
1853.....	.....	1,093	742	734
1854.....	.....	1,092	808	834
1855.....	37,554	1,039	687	766
1856.....	.....	1,034	632	790
1857.....	.....	1,051	585	818
1858.....	.....	827	467	626
1859.....	.....	983	496	739
1860.....	36,827	1,077	497	720
1861.....	.....	949	459	713
1862.....	.....	763	368	641
1863.....	.....	657	302	695
1864.....	.....	658	335	633
1865.....	30,990	672	406	575
1866.....	36,878	813	625	749
1867.....	.....	826	596	640
1868.....	.....	860	495	857
1869.....	.....	858	575	763
1870.....	40,928	926	515	952
1871.....	.....	886	647	1,033
1872.....	.....	1,099	670	1,048
1873.....	.....	1,365	705	1,161
1874.....	.....	1,356	580	1,184
1875.....	49,688	1,296	513	1,020
1876.....	.....	1,264	514	1,147
1877.....	.....	1,341	552	1,029
1878.....	.....	1,332	546	1,088
1879.....	.....	1,412	635	1,006
1880.....	59,485	1,770	744	1,312
1881.....	.....	1,840	786	1,287
1882.....	.....	1,755	813	1,322
1883.....	.....	1,681	848	1,432
1884.....	.....	1,786	735	1,401
1885.....	64,051	1,763	707	1,328
1886.....	.....	1,813	813	1,499
1887.....	.....	1,835	873	1,872
1888.....	.....	1,866	886	1,763
1889.....	.....	2,133	965	1,894
1890.....	77,696	2,175	979	1,960
1891.....	.....	2,203	987	1,976

ANNUAL REPORT
OF THE
SUPERINTENDENT OF BURIALS
OF THE
CITY OF LOWELL,
FOR THE YEAR 1891.



LOWELL, MASS. :
CITIZEN NEWSPAPER COMPANY, PRINTERS.
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, MARCH 19, 1892.

Received and ordered on file Sent down for concurrence.

MICHAEL J. DOWD,

City Clerk.

IN COMMON COUNCIL, MARCH 22, 1893.

Received and ordered on file in concurrence.

DAVID CHASE, *Clerk.*

LOWELL, January 1, 1892.

To the City Council of the City of Lowell:—

Gentlemen:—I herewith submit the annual report of the Superintendent of Burials for the year ending December 31, 1891.

It contains an account of the number of bodies removed from one cemetery to another cemetery, the number of removals from one lot or grave to another lot or grave, the number of bodies brought here from other cities and towns for interment, and the number of bodies removed out of the city after having been interred here. Also the amount of money received for the sale of single graves.

The names of deceased persons that have been removed from one place to another can be found on file at the City Clerk's office.

Remains removed from Edson Cemetery to Lowell Cemetery,	5
“ “ “ Lowell “ “ Edson “	2
“ “ “ School St. Yard “ “ “	2
“ “ “ Hamblet Cemetery to Edson “	2
“ “ “ one lot or grave to another lot or grave,	16
“ brought here from other cities and towns,	68
“ removed, (after interment here,) out of the city,	5

I have received for the sale of single graves, one hundred and sixteen dollars, (\$116.00.) and have paid, the same to the City Treasurer.

Respectfully submitted,

FREDERICK A. BATES,

Supt. of Burials.

FOURTEENTH

ANNUAL REPORT

OF THE

BOARD OF HEALTH,

OF THE

CITY OF LOWELL,

FOR THE YEAR 1891.



LOWELL, MASS. :
HARRINGTON BROS., PRINTERS.
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, Feb. 2, 1892.

Received and ordered on file; sent down for concurrence.

MICHAEL J. DOWD, *City Clerk*.

IN COMMON COUNCIL, Feb. 2, 1892.

Received and ordered on file, in concurrence.

DAVID CHASE, *Clerk*.

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BOARD OF HEALTH.

1891.

CHARLES R. COSTELLO, *Chairman.*

JAMES B. FIELD, M. D., *Secretary.*

WM. P. LAWLER, M. D., *City Physician.*

HEALTH DEPARTMENT OFFICERS.

H. H. KNAPP, *Agent and Superintendent.*

F. A. BATES, *Foreman.*

STEPHEN GARRITY, }
JOSEPH MACK, } *Inspectors.*

THOS. O. ALLEN, *Inspector of Milk, Vinegar and Provisions.*

REPORT.

OFFICE OF THE BOARD OF HEALTH, }
LOWELL, JANUARY 30, 1892. }

To the Honorable City Council:

In accordance with the requirements of the Public Statutes, the Board of Health hereby submit its fourteenth annual report, covering the year 1891.

MEMBERSHIP AND ORGANIZATION.

In January Charles R. Costello was reappointed, and by virtue of the appointment of William P. Lawler, M. D., as City Physician, the Board for 1891 consisted of:—

DR. JAMES B. FIELD.

DR. WILLIAM P. LAWLER.

CHARLES R. COSTELLO.

As required by law, the Board met for organization on the first Monday in February. Charles R. Costello was chosen Chairman, and Dr. Field Secretary. Horace H. Knapp was elected Agent.

GROWTH OF THE DEPARTMENT.

According to the last census the population of the city is increasing at the rate of twenty-seven hundred per annum. This means a yearly increase of work, and the department has been able to meet the requirements of this year without increasing the number of employees.

Public Health is a most important factor in the happiness and prosperity of a community, and it is only within recent years that the laws and regulations pertaining to it have received the proper attention. Health laws should not be made for oppression; but if errors are to be made in them, they should be made on the side of the necessities of the many, rather than in yielding to the assumed rights of the few. So long as contagious diseases can be prevented, and so long as the health and comfort of a community are disturbed by nuisances, the need remains for greater work and further progress.

NUISANCES.

Privy vaults full, notified to remove contents	92
Privy vaults removed and discontinued	78
Privies filthy, ordered cleaned	69
Privies, contents removed	1,414
Water closets, foul and offensive	22
“ “ insufficient water supply	40
“ “ out of repair	28
Sinks not trapped	130
Waste pipes of improper material	8
Defective drainage	34
Filthy premises	71
Swine on premises	3
Dead animals removed	1,600
Glandered horses killed	8
Houses vacated	4
Houses disinfected after contagious disease	324
Plumbing inspected and approved	127
Visits made to houses (contagious diseases)	619

VAULT CLEANING.

The Board of 1890 had a very unpleasant experience in this department of their work, caused by their action in refusing to issue permits to remove contents of vaults to Thos. F. Fay, thereby plac-

ing in the control of Fred A. Fox a monopoly of faecal transportation. The city government was interviewed through the Mayor, Aldermen and Councilmen; the members of the Board of Health were bulldozed and maligned, and it seemed for a time as if the only question of importance to settle by the incoming administration was who should carry the bucket. The Board were compelled to take the action as above stated, for the clearest of sanitary reasons, and they have never doubted the wisdom of their decision, but taking into consideration the pressure that was brought to bear upon them, and having nothing but the best interests of the city in view, they decided to make one more effort in an "open to all" contest, and the work of cleaning vaults during the year 1891 was given to three parties (although one was distanced from the start), under the strict construction of the following rules:

REGULATIONS CONCERNING PRIVY VAULTS.

RULE 1. All vaults within the city must be cleansed by the odorless process, unless written permission to cleanse otherwise has been obtained from the Board of Health.

RULE 2. In no case shall the contents of any privy vault be removed unless the same is properly disinfected before the work is commenced, and also during the progress of the cleaning and after the completion of the cleaning, by such disinfectants as shall be approved by the Board of Health.

RULE 3. No privy vault shall be opened without permission of the Board of Health, nor in any other mode, nor any other time than such as the Board of Health may direct.

RULE 4. Whenever a privy vault is cleansed the entire contents thereof shall be removed.

RULE 5. The licensee shall not open or work at vaults before 7 A. M., nor between the hours of 11 A. M. and 1.30 P. M., nor after

5 P. M. He shall have his name well painted on both sides of tanks and wagons. Same to be clean, air-tight, and free from any leakage; he shall remove the contents of vaults outside of city limits, and avoid, as far as possible, travelling in the principal streets when crowded.

RULE 6. No wagon or apparatus used in the cleaning out of vaults shall be allowed to stand in the streets at any time except when being loaded.

RULE 7. These prices are fixed—\$3.00 for a tank load of sixty cubic feet, and 20 cents for each barrel filled with solid material, provided that no vault measuring sixty cubic feet or less shall cost more than \$3.00 for cleaning.

RULE 8. One or more vaults in the same enclosure, the property of one owner, and cleaned in the same day, shall be considered as one vault, and charged for by the total number of loads taken at the rate above specified.

RULE 9. Where several vaults belong to one estate, or are in care of an agent, or connected with a corporation, such deduction may be made as the parties may agree upon.

RULE 10. Whenever the contents of a vault are less than sixty cubic feet, it shall be considered as one load and paid for accordingly.

RULE 11. No person shall engage in vault cleaning without a permit from the Board of Health; they shall be subject at all times to the orders of said Board, delivered through their Agents or Inspectors, and refusal to comply with said orders will forfeit their permit.

RULE 12. If complaint is made by any property owner or agent that there has been an infraction of these rules, or any neglect, gross uncleanness, profane or indecent language on the part of any

REMOVAL OF VAULTS.

No vaults have been removed by order of the Board this year, unless based upon complaint and inspection, and while in some cases action has been suspended for reasons presented to the Board, most of the orders have been complied with, and it has been necessary to issue but five warrants to complete the work undertaken.

While a privy vault may be a relic of barbarism, if they are properly taken care of they are immeasurably preferable to a great many of the water closets in the tenement houses of some of Lowell's richest property owners, for they can be seen at all times, and their condition improved with little cost of time or money.

The Board will use its best efforts in the future to reduce the number of vaults in the city, where it can place something that is an improvement on the property from which the vaults are ordered out.

The following lists show the work done by the Board in this branch of its duties.

Vaults discontinued, and filled with earth, by order of the Board of Health, during the year 1891 :

		Vaults.	Privies.
19 Arlington Street	Ward 5	1	1
36 Race Street	" 5	1	1
170 South Hastings Street	" 4	1	1
Broadway, corner Willie Street	" 5	1	8
108 and 110 Fletcher Street	" 5	1	3
36 Livingston Street	" 3	1	2
1 to 17 Hudson Street	" 3	4	12
34 Fourth Street	" 2	1	2
22 and 24 Third Street	" 2	1	2
14 Dodge Street	" 1	1	1
122 and 124 Worthen Street	" 1	1	2
25 Winter Street	" 4	1	3
Rear 31 Chelmsford Street	" 4	1	1
82 Fayette Street	" 6	1	2
30 Third Street	" 2	1	2

80 Bridge Street	" 2	1	2
74 Chapel Street	" 3	1	1
10 to 16 Seventh Street	" 2	1	6
13, 15, 17 and 21 Smith Street	" 4	4	5
68 Crosby Street	" 3	1	2
41 Elm Street	" 3	1	1
8 and 10 Ash Street	" 6	1	2
7 Richardson Avenue	" 2	1	1
52 Ford Street	" 5	1	2
63 and 71 Whipple Street	" 3	1	6
22 Whipple Street	" 3	1	2
1 Kingsman Street	" 3	1	3
24 " "	" 3	1	2
44 " "	" 3	1	1
46 " "	" 3	1	1
45 " "	" 3	1	1
6 and 7 Kingsman Street	" 3	1	3
14 Newhall Street	" 3	1	1
25 and 27 Newhall Street	" 3	1	2
19 and 21 " "	" 3	1	3
9 Newhall Street	" 3	1	1
60 Market Street	" 2	1	1
241 Dutton Street	" 1	1	1
1, 2, 3, 5 and 7 Wamesit Court	" 5	6	10
25 Austin Street	" 5	1	8
26 " "	" 5	1	1
1 Coral Street	" 4	1	1
7 and 8 Lowell Place	" 1	1	2
50 Union Street	" 3	1	1
18 and 20 Whipple Street	" 3	2	3
69 Howard Street	" 4	1	1
33 Varney Street	" 5	1	1
2 and 4 Mt. Washington Street	" 5	1	2
		60	123

Vaults ordered discontinued in 1890, and order complied with in 1891.

		Vaults.	Privies.
45 Concord Street	Ward 6	1	1
87 to 91 Fayette Street	" 6	1	3
79 Fayette Street	" 6	1	3
76 Fayette Street	" 6	1	3
90 High Street	" 6	1	1
16 Howe Street	" 6	1	2
20 to 24 Howe Street	" 6	2	6
18 Howe Street	" 6	1	1
25 and 27 Andover Street	" 6	1	1
59 and 65 Church Street	" 6	1	6
Charles Court	" 6	1	8
6 Chestnut Street	" 6	1	1
68 Charles Street	" 6	1	2
Cushing Street	" 5	1	4
Fort Hill Avenue	" 6	1	2
19, 21, 29 and 31 Riverside Avenue	" 5	2	3
		—	—
		18	47

Vaults ordered discontinued in 1891, and completed.

		60 containing 123 privies.	
Vaults left over from 1890, and completed in 1891,	18	"	47
	—		—
Total number, 1891	78	"	170

TENEMENT HOUSES.

Especially the older tenement houses in Lowell are in a very bad condition. They are considered as an investment by their owners, and they are expected to yield as large an income as possible, and the health of the tenant is rarely taken into consideration.

The cheap water closets, that from long use have become vile and rotten, are built on the direct supply plan, and many are not provided with sufficient water, as it costs money, and the owner of a meter is very often miserly of the amount furnished, so that the "container" is a literal containing of everything that is dropped into

it, leaving its foul smearing, upon every opening of the valve, to be drawn directly into the pipes, to mingle with the supply from which drinking water is taken: there are frequent perforations of lead pipe, or the badly jointed, or no jointed iron pipes, are rusted and leaky, while there is an absence, or insufficiency of soil-pipe ventilation.

The Board of Health have every reason to believe that some cases of typhoid fever that have come under their notice this year have been greatly fostered by the condition of the house in which it found a victim, through faults of water closets, waste pipes, soil-pipes, and traps, and they consider the presence of the "pan" closet, without sufficient water, as a great danger to the family, as serious epidemics of typhoid fever have been directly traced to this source of contamination. Its undetected agency in producing disease has probably been very great.

The water where the charge is by rates is open to another serious and totally different reason for sickness and contagion. Here the water used is very much less than the water wasted, which escapes into the soil through the defective joints of sewers and house drains, thereby extending the area of saturation and contamination. Three cases last spring were found where the pipes had frozen (typhoid fever in each house), and the tenants had been told by the owner that they must carry water in pails, every time they used the closets, and the containers were found splashed and coated, with an accumulation of faecal matter, which pails full of water were powerless to remove, and when the pan was turned down the gases escaped through the seat with a stifling whiff, which seemed loaded with bacteria. Such extreme cases can be dealt with severely and arbitrarily, but very often the property in its neglected and dilapidated condition has not a money value equal to the cost of placing it in

a satisfactory sanitary condition, without tearing it down and rebuilding the entire structure, which the owners are unwilling to do; so that the Board of Health are obliged to let it remain or order it vacated, such action having been taken in a number of cases.

DEPARTMENT STABLE.

In the last three reports attention has been called to the fact that the stable accommodations were not a credit to the city. No other department of the city is as poorly equipped with stable facilities as is the Health Department.

Every week day of the year the horses are at work drawing ash and swill teams.

The stable is an old wooden structure, with a poor cellar, a small loft, and no means of ventilation for the sixteen horses housed therein. There is insufficient shed room for all the carts and sleds, some of which have to stand outside exposed to the action of the weather. We need more room for horses, and our facilities for keeping our wagons and sleds are very limited and poor.

The Board has refrained from any expenditure this year, trusting that by the transfer of the Water Department stables to their new quarters at the Pumping Station, we might be allowed to take possession of their old stables. If it cannot be done, the Board will feel obliged to divert considerable of their appropriation for 1892 to the improvement of the present location, and we also need an ambulance, particularly for the conveyance of contagious diseases from houses to the City, or St. John's hospitals. We are now obliged to rely on some old hack, unfit and improper for the conveyance of a well person, to say nothing of the suffering and inconvenience it occasions those who are stricken with sickness, so serious that removal from home is considered essential to their proper care and treatment.

In consequence of the criticism of the Mayor, in his address to the City Council of 1891, the Board have made a special effort to keep their expenses as low as possible, and while they have succeeded in bringing them under the amounts expended for the last few years, they feel that it cannot be continued, without impairing the efficiency of the department. We need and shall have to purchase at least two new horses, while our harnesses need quite a thorough renovation. In order to save the expense of new horses, we have spent \$218.00 in hiring horses by the day during the year, and we are of the opinion that it is not good economy to continue doing so in the future.

LICENSED STABLES.

The General Court of 1891 enacted the following legislation :

An Act Relating to Stables in Cities.

SECTION 1. No person shall hereafter erect, occupy, or use any building in any city for a stable for more than four horses, unless first licensed thereto by the Board of Health of same city, and, in such case only to the extent so licensed.

SECTION 2. No person shall hereafter occupy or use any building for a livery stable, or a stable for taking and keeping horses and carriages for hire or to let, within two hundred feet of any church or meeting-house, erected for the public worship of God, without the consent in writing of the religious society or parish worshipping therein.

SECTION 3. The foregoing provisions shall not be construed to prevent any such occupation and use, authorized by law at the time of the passage of this act, to the extent authorized at the time.

SECTION 4. Any person violating the provisions of this act shall be liable to a fine of five dollars, for each and every day such offence continues, and any court, having equity jurisdiction, may restrain

any such erection, occupation, or use, contrary to the provisions of this act.

Acting under the provision of the above law the Board have examined the premises of all applicants for licenses to keep more than four horses, and have granted such license to thirty-two petitioners, and refused permission to two petitioners, on the ground of insufficient accommodations.

ASHES.

During the year 1891, eighteen thousand five hundred and fifty (18,550) loads of ashes were removed from houses, to the different dumping grounds that we have in use. They are situated on Aiken, First, Lawrence, Chelmsford and Middlesex Streets; while occasional loads are delivered in other places, if any citizen desires to use them for filling purposes. We rarely have complaints from residents near them during the winter, as the loads are fairly clean ashes, and very desirable for some purposes. But, from May to October, the Board is complained to quite sharply at times, which naturally brings us to the consideration of the

DISPOSAL OF GARBAGE.

The Board of Health has repeatedly called the attention of the City Council to the condition of the dumps,* to the complaints that have been made, and to the desirability of destroying the garbage of the city by cremation. Early in 1891 a committee of the City Council was appointed to investigate the subject. March 16, 1891, the committee and the Board of Health inspected the swill-house and several dumps. After several meetings were held and all the information gathered that could be by correspondence, they voted to visit Gravesend, N. Y., and inspect a garbage furnace operated by the Engle Cremator Company. The committee, accompanied by

Chairman Costello and Dr. Lawler, of the Board of Health, made a visit to Coney Island, where the town of Gravesend has in operation a furnace built by the Engle Company.

Cremation accomplishes everything that is desired, in disposing of this sort of material, and the cost is comparatively light.

The benefits resulting are best told by the authorities in such cities as Savannah, Norfolk, Des Moines, Memphis, and many others which might be mentioned.

The authorities of Gravesend speak in high terms of praise of the furnace operated at Coney Island, where thousands of people are fed daily during the summer months.

The Engle cremator is a rectangular brick structure, 25 feet long, and 8 feet wide, and 12 feet high. At one end is a brick chimney 6 feet square, and 75 feet high. The furnace is constructed of first quality fire brick, and with two fires, one at each end, producing intense heat. On top are three circular openings, each 24 inches in diameter, and one large apening 34 inches in diameter. There are platforms at the side of these openings, allowing a cart to be emptied directly into them, and over all, a covering house with sliding doors and iron roof. Below on one side, and at each end, are two large fire doors, and along the bottom between these fire doors, are others, called ash-pit doors, while above there is a range of smaller round doors, through which the garbage is stirred up, or stoked. Half-way from the top to the bottom of the interior is set the bars which catch and retain the garbage fed through the circular holes on top. The action of the furnace is continuous. The garbage is fed in as needed, with no material loss of heat, or escape of flame; the closing of the doors, before this is done, creates a strong down draught through the feeding holes. The larger hole receives the body of a horse, though a portion only of this opening is used in

actual service. The construction of the cremator is of the most solid and massive character; the utmost care is taken to make every part as strong as the best brick and iron can be put together.

The committee witnessed the consumption of garbage by the cremator, the furnace having been charged with an unusually large amount of refuse, and were very well pleased with its work. There was no smell, no smoke was emitted through the stack, and looking in upon the garbage being consumed, those engaged in the inspection were satisfied with the intensity of the heat. Some time after their return the following report was presented to the City Council:

LOWELL, July 28, 1891.

To the Honorable City Council:

The special committee appointed to consider the advisability of purchasing a garbage cremator for the city of Lowell, would respectfully report as follows:

They have thoroughly investigated the merits of the Engle furnace, and would recommend that one be purchased for the city, as the complaints from the people residing near the various dumps throughout the city have made the furnace necessary for the best sanitary interest of the city, and your committee would recommend that a loan of eight thousand dollars (\$8,000) be made, and that the same be transferred to the appropriation for Health, and the same be built under the direction of the Board of Health.

COMMON COUNCIL, July 28, 1891.

Read and accepted. Sent up for concurrence.

BOARD OF ALDERMEN, September 1, 1891.

Read and laid on table.

CITY OF LOWELL, IN COMMON COUNCIL.

Resolution to borrow eight thousand dollars (\$8,000).

RESOLVED, By the Board of Aldermen, and Common Council of the City of Lowell, in City Council assembled, as follows:

FIRST. That the City Treasurer of the City of Lowell, under the direction of the Joint Standing Committee on Finance, be, and hereby is authorized to borrow for, and in behalf of the City of Lowell, of any bank, firm, corporation, or individual, or of the Commissioners of the Sinking Funds of the City of Lowell, the principal sum of eight thousand dollars (\$8,000), upon such terms, and at such rate of interest as said committee may determine.

SECOND. That the principal sum borrowed under authority of this resolution shall be paid in ten equal annual payments, the first payment to be made in one year from the date of the security given, and the remaining payments to be made on the same day, of the same month, in each succeeding year, until the full amount of eight thousand dollars (\$8,000) is paid.

THIRD. That the said sum of eight thousand dollars (8,000) so borrowed shall be placed to the credit of the appropriation for Health, and shall be used for the purchase and erection of a cremator, for the destruction of the city's garbage; also for the purchase of land on which to erect the same.

IN COMMON COUNCIL, July 28, 1891.

Read once, and ordered to second reading.

Read twice and passed: sent up for concurrence.

BOARD OF ALDERMEN, September 1, 1891.

Laid on table.

The resolution is now where it will probably remain forever, as it depends upon a ruling of the Mayor, as to whether the present City Council have the right to look upon the unfinished business of the City Council of 1891 as within the jurisdiction of the City Council of 1892, in the absence of any vote of record, referring all such to their successors.

Be that as it may, the Board of Health feel that they have given the subject a great deal of time and attention, and if it is strangled on the eve of success it is through no fault of theirs, and they shall now let the matter rest for the present.

	1891	1890	1889	1888
Barrels of swill sold	14,532	12,152	10,756	11,296
“ “ “ destroyed, unfit for use,	56	800	1,400	675
Total number of barrels collected .	14,588	12,952	12,156	11,971

In addition to the amount thus collected, probably as much more swill was gathered from the hotels, and corporation boarding houses, as 58 licenses were granted by the Board to collectors.

Receipts from swill in 1891	\$3,633.00
“ “ manure “ “	62.57
“ “ horse “ “	200.00
“ “ wagon “ “	50.00
Total receipts in 1891	\$3,945.57

INSPECTION OF MILK.

The work of this department has been extended and enlarged during the year by the fitting up of a laboratory for the chemical analysis of milk, butter, etc., and the use of the lactometer has been dispensed with, as it was not deemed sufficiently accurate.

Number of licenses issued to dealers	163
“ “ “ “ “ store keepers	134
Money received for same	\$148.50
Number of milk inspections	1,300
“ “ warning notices sent	81
“ “ convictions	12
Amount paid to city in fines	\$750.00
Number milk routes in Lowell	127

January 31, 1891, a package was handed by a milkman to the Inspector of milk, containing two hundred and fifty dollars (\$250), with a list of eleven names of milk men doing business in Lowell, all

names in one hand-writing. The money was counted by the Chairman of the Board of Health, replaced in the same envelope, sealed, and placed as a special deposit in the Merchants National Bank, where it still remains waiting an order of the court.

A warrant was sworn out, a bill was found by the grand jury, and the case is now pending in the court, having been continued from time to time.

While the Board is well pleased with the improvement in this department, it believes still more satisfactory results can be obtained with a larger expenditure of time and money.

All dairies should be frequently inspected, the owners compelled to provide roomy and well ventilated stables, so that the cows might be kept in a clean and healthy condition, groomed frequently, kept from swill feeding, and the rule insisted on that all utensils used in milking, and the sale of milk, should be kept fresh and clean.

SOURCES OF SUPPLY.

Lowell	188 cans per day.
Tewksbury	318 " " "
Dracut	675 " " "
Pelham	277 " " "
Tyngsboro	222 " " "
Chelmsford	410 " " "
Westford	164 " " "
Dunstable	45 " " "
Billerica	228 " " "
Carlisle	50 " " "
Windham	30 " " "
Hudson	11 " " "
Nashua	16 " " "
Andover	23 " " "
Wilton, N. H., by rail	836 " " "
Total	3,493

INSPECTION OF PROVISIONS.

Every week during the year, and twice during the summer months, the markets have been visited, and the Board is pleased to report that as a rule they have been found in a neat and clean condition, with but little meat or provisions on hand that was not fit for sale. One dealer was found in the spring, having in his possession some embryotic veal, which was taken and destroyed, but partly for the reason that it was the first offence, and owing to a misunderstanding between the wholesaler and the retailer who purchased it, the complaint was placed on file, with the understanding that a second offence of like character would bring speedy and certain punishment.

BATH HOUSE.

This structure was launched for business July 1, and up to September 24, when it was closed, twenty-one thousand eight hundred and fifty-three baths were taken in its sparkling waters, but it is very probable that more dirt was taken away as a result of the ablution than was left.

The more body there is to a soup, the greater strength it imparts to the system, and the same rule may apply to the substance that is used in bathing the person.

The city water where the bath house is located is certainly not fit for drinking purposes, and the Board is strongly of the opinion that it is very objectionable for bathing purposes, especially during an east wind, when the white scum of the sewage permeates the entire building. But unfortunately the further down the river you go, the more turbid and filthy becomes the water; while if you look for a location above the falls, you have on the one side of the river the inlet to the water supply, and on the other the club-house of the

Vespers, both very properly objecting to its being placed on or near their water front.

At an expense of two hundred and eighteen dollars (\$218.00) the ark has been landed high on the sand for the winter, where every light of glass and the frame-work of every window will be broken, and until the "robins nest again" the building will be used for a drunkard's home and harlot's retreat, when the Board will send down the odorless to remove its accumulation of winter filth, and the giving it again to the foul embrace of the sewer will be repeated.

The following is a list of the expenses for the past five years, after deducting the expenses of the bath house in 1889, 1890, and 1891 :

1887	.	.	.	.	.	.	.	.	.	\$22,375.21
1888	.	.	.	.	.	.	.	.	.	25,098.84
1889	.	.	.	.	.	.	.	.	.	30,051.45
1890	.	.	.	.	.	.	.	.	.	30,754.11
1891	.	.	.	.	.	.	.	.	.	30,127.28

CONTAGIOUS DISEASES.

The practice of the Board, when a case of diphtheria, scarlet fever, or measles is reported, is at once to give warning notice to the public by placarding the house in such a manner as to attract the attention of every one who approaches the house. The card is attached by an employee of the Board, and the family at the same time furnished with circular containing information relative to the particular disease in question. A careful record is made of the name and age of the patient, street and number of the house; and answers required to the questions on the following card, in diphtheria, scarlet fever, and typhoid fever, but in measles we only leave circular giving information and placard the house :

DIPHTHERIA.

Name.....
Res...... *Occupation*.....
Physician.....
Discovery of Disease.....
Name of Milkman.....
Condition of Plumbing at Res......
Condition of Drainage.....
Condition of Water-Closet or Vault.....
Probable Exposure..... *Water Used*.....
Previous Condition of Patient.....
General Information or Suggestions.....
.....
.....
Investigated by.... *Date*.....

DEATHS FROM PRINCIPAL CONTAGIOUS DISEASES.

	1888	1889	1890	1891
Diphtheria and croup	113	100	41	15
Scarlet fever	13	13	7	8
Measles	4	3	2	11
Typhoid fever	63	65	123	77
Total	193	181	173	111

This shows a steady decrease in the mortality from contagious diseases during the past four years, while there has been a co-existent increase in population. If we consider solely the diseases which the Board of Health tries to prevent by direct contagion we find the following marked decrease in mortality during the past five years :

	1887	1888	1889	1890	1891
Total deaths from diphtheria, scarlet fever, and measles	200	130	116	50	34

This is the true test to apply to the administration of the Board of Health, and the proper answer to the charges made by the Mayor, that the expenses of the Board and the death rate "have marched forward arm in arm, from 1885 to the present time."

In order to prevent an epidemic of diphtheria, scarlet fever or measles, the Board are properly expected to use constant care by notification, information, isolation and fumigation, and they might be held in a less degree responsible for typhoid fever, but none of the present Board are possessed of the Rosicrucian secret of extending longevity or preserving life, and it is an unusual and severe rule that requires any Board to prevent the operation of a natural law, in force since the world began, and they cannot help feeling that if the results of the work done had been given more study and examination, a more reasonable criticism would have been written.

At the moment of writing, Lowell is suffering a death rate from pneumonia, bronchitis, consumption and la grippe, far beyond anything in its past experience, and if it is due in any way to the omission of work that should be done by the Board of Health, they should be disgraced and discharged, but most people know that their sickness comes from some act of carelessness, and their recovery or death, so far as human agencies can control, is entirely in the hands of their physician and nurse.

NUMBER OF CASES OF CONTAGIOUS DISEASES REPORTED.

	1889	1890	1891
Diphtheria and croup	298	157	78
Scarlet fever	155	230	237
Measles	109	240	675
Typhoid fever	194	454	296

As stated in former reports the figures for diphtheria and scarlet fever are reliable. Measles is reported with more regularity than

formerly. Later in the report mention is made of the endeavor to obtain accurate reports of the cases of typhoid fever.

SMALL POX.

The nearest approach to a visitation of this dreaded disease has been a mild scare, based upon the receipt of two telegrams from the Montreal Board of Health, stating that a father and child named Cote, had left a town in the Province of Quebec, where there was then present forty-seven cases of small pox, purchasing tickets for Lowell. They were very soon located, and it was found that although they left the place where there was a serious outbreak, they were in no way exposed, and no harm resulted to the people of Lowell.

Our city has been increasing rapidly in population for the last few years, by immigration from Canada, and the ease and quickness by which it can be brought to our doors, by the Canadian Pacific and Boston and Maine Railroads, make us a special target for this disease, and we can protect ourselves only by constant vigilance and universal vaccination. The Board therefore wishes all adults who are in doubt whether or not they were vaccinated when children, to come to the office of the Board between the hours of 4 and 5 P. M., daily, where they can be vaccinated free of charge.

The total number of successful vaccinations performed at the office of the Board during 1891 has been five hundred and twenty-seven.

The vaccinations have been performed by a regular practicing physician, and only such virus has been used as has been furnished by the Board of Health, and known to be good quality.

The city of Lowell is very well furnished with accommodations in case of the breaking out of small pox, but it is unfortunate that we

have not a similar institution nearer the heart of the city, for the isolation and proper treatment of diphtheria and scarlet fever patients.

If efficient methods can be applied to the eradication of one contagious disease, why may they not, by vigorous enforcements, be of great advantage in other diseases, classed as preventative, which are always with us?

Until we can thoroughly isolate patients, particularly those of the poorer classes, who have bad hygienic surroundings, we shall some time have to meet a frightful mortality from these diseases.

And in connection with a hospital of this description, could be built a public disinfecting station, where the furniture, carpets, bedding, and wearing apparel from houses in which there may have been contagious diseases, may be sent and thoroughly disinfected with super-heated steam.

DIPHTHERIA AND CROUP.

	1888	1889	1890	1891
Cases reported	255	297	157	78
Deaths	113	100	41	14
Per cent. of fatal cases .	44	33	26	17

This is probably the best showing for diphtheria and croup ever made in Lowell. Records for the earlier years of the city's history are not at hand, but at no time for the last twenty-three years have there been fewer deaths from diphtheria and croup than in 1891.

ANNUAL REPORT OF

DIPHTHERIA.

1891	Reported cases.	Deaths.
January	10	2
February	7	1
March	7	1
April	9	0
May	8	4
June	7	1
July	4	1
August	2	1
September	0	0
October	6	1
November	6	0
December	9	1
	—	—
Total	75	13

	Cases reported.	Deaths.
Ward 1	8	1
“ 2	9	2
“ 3	20	3
“ 4	12	0
“ 5	12	4
“ 6	14	3
	—	—
Total	75	13

MEASLES.

1891	Reported cases.	Deaths.
January	146	0
February	255	2
March	160	2
April	62	1
May	24	3
June	22	2
July	5	1
August	1	0
September	0	0
October	0	0
November	0	0
December	0	0
	—	—
Total	675	11

The epidemic of measles, which began in the fall of 1890, was nearly over by the last of June, being coincident with the school year.

SCARLET FEVER.

During the last four years the number of cases have increased, but as the disease has been of a less severe type, the number of deaths have diminished.

Scarlet fever.	1888	1889	1890	1891
Cases reported	89	155	230	237
Deaths	13	13	7	8
Per cent. of fatal cases .	14	8	3	3

SCARLET FEVER.

1891	Reported cases.	Deaths.
January	6	2
February	10	0
March	12	0
April	26	1
May	19	1
June	24	2
July	21	1
August	1	0
September	14	0
October	30	1
November	26	0
December	49	0
Total	<hr/> 237	<hr/> 8

It is at least a coincidence that during the past three years scarlet fever has begun to increase with the opening of school in September. We would naturally expect about thirty-three per cent. of the cases to occur during the last four months of the year, but in 1889, sixty-five per cent. of the cases came during this period; in 1890 forty-two per cent. and in 1891 fifty per cent.

ANNUAL REPORT OF

TYPHOID FEVER.

1891	Reported cases.	Deaths.
January	65	19
February	46	14
March	46	10
April	21	6
May	9	4
June	10	1
July	12	4
August	1	4
September	16	3
October	9	7
November	15	3
December	43	2
Total, 1891	293	77
“ 1890	454	123
“ 1889	194	65

DEATHS FROM TYPHOID FEVER.

1891.

January	19
February	14
March	10
April	6
May	4
June	1
July	4
August	3
September	3
October	7
November	3
December	2
Total	77

PLACE OF DEATH.

Ward 1	.	.	.	.	.	.	.	.	.	.	6
" 2	.	.	.	.	.	.	.	.	.	.	12
" 3	.	.	.	.	.	.	.	.	.	.	13
" 4	.	.	.	.	.	.	.	.	.	.	9
" 5	.	.	.	.	.	.	.	.	.	.	6
" 6	.	.	.	.	.	.	.	.	.	.	10
Lowell Hospital	.	.	.	.	.	.	.	.	.	.	10
St. John's Hospital	.	.	.	.	.	.	.	.	.	.	11
Total	.	.	.	.	.	.	.	.	.	.	77

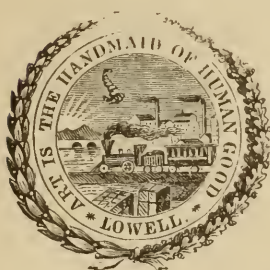
Males .	.	.	.	.	.	.	.	.	.	.	38
Females .	.	.	.	.	.	.	.	.	.	.	39
Oldest .	.	.	.	.	.	.	.	.	.	.	70
Youngest .	.	.	.	.	.	.	.	.	.	.	4
Average age .	.	.	.	.	.	.	.	.	.	.	27

CASES REPORTED.

Ward 1	.	.	.	.	.	.	.	.	.	.	38
" 2	.	.	.	.	.	.	.	.	.	.	59
" 3	.	.	.	.	.	.	.	.	.	.	65
" 4	.	.	.	.	.	.	.	.	.	.	35
" 5	.	.	.	.	.	.	.	.	.	.	51
" 6	.	.	.	.	.	.	.	.	.	.	45
Total	.	.	.	.	.	.	.	.	.	.	293
Males .	.	.	.	.	.	.	.	.	.	.	158
Females .	.	.	.	.	.	.	.	.	.	.	135
Average age .	.	.	.	.	.	.	.	.	.	.	21
Water Closets .	.	.	.	.	.	.	.	.	.	.	225
Vaults .	.	.	.	.	.	.	.	.	.	.	68

There were thirty-three deaths from the reported cases, leaving forty-four deaths that were not reported to the Board by the physicians in charge, which if the same proportion was allowed of recovery, would mean that over four hundred (400) cases of typhoid fever were not reported in 1891.

The Board of Health regrets to reiterate the statement made in last year's report, that typhoid fever cannot be reached by the Board with the same promptness as the more contagious diseases, owing to the carelessness or stubbornness of the physicians; this evil continually increasing, more drastic measures were found unavoidable, and in November the following circular was given to every physician in Lowell, and since that time the number of cases reported have increased materially.



OFFICE OF THE BOARD OF HEALTH.

LOWELL, MASS., Nov. 25, 1891.

To the Physicians of Lowell:

GENTLEMEN:—The city of Lowell has for many years suffered severely from typhoid fever, and to such an extent in the later months of 1890 that the best expert assistance was called to make a thorough and exhaustive investigation, which was done at a considerable expense.

In 1888 there were 63 deaths from Typhoid Fever.

In 1889 “ “ 65 “ “ “ “

In 1890 “ “ 173 “ “ “ “

In 1891 to November 1, there were 63 deaths.

Cases reported in 1890, 454.

“ “ “ 1891 to November 1, 238.

The Lowell Board of Health, in April, 1888, under the authority of the Public Statutes, Chapter 80, Section 18,—“The Board shall make such regulations as it judges necessary for the public health and safety. Whoever violates any such regulation shall forfeit a sum not exceeding One Hundred Dollars,”—included typhoid fever in the list of diseases considered dangerous to the public health, and required physicians to report them to the Board.

RULE 2. The Board consider that varioloid, membranous croup, measles and *typhoid fever* are diseases dangerous to the public health, and require immediate notification of their existence.

They have been aware since then that typhoid fever has not been reported by physicians with the same promptness and regularity as are the more contagious diseases. diphtheria and scarlet fever.

In the report of 1888 it was remarked, "Physicians who have not given the matter thought often ask what benefit is derived from reporting typhoid fever to the Board of Health, since there is no need of isolation or fumigation. While typhoid fever is most frequently introduced into the system by contamination of the drinking water with its germs, it may be introduced by direct contact with the patient and his discharges. Circulars relative to typhoid fever are sent to every householder where a case exists; disinfection of the dejecta, advised in this circular, may save the occurrence of a second case of the disease. An inspection of the premises may discover the source of the disease, or prevent the contamination of the water supply of other families.

The fact that there frequently are unsanitary surroundings in typhoid fever which can be remedied is a strong reason why this disease should be reported to the Board of Health. The Board is aware that the percentage of deaths to reported cases is very much larger than it should be, and appearing in the reports of the Board, are examined and criticized as reliable statistics when they are very incorrect and misleading. Even if nothing were gained by reporting the disease, other than an opportunity to make a scientific investigation as to the causes of the malady, then it should be reported.

It seems as if some physicians were interested in disease wholly from a financial point of view, and it is constantly growing worse instead of better. The physician who reports typhoid fever at present is the exception and not the rule. Take as an example the month of October, 1891.

Case died Oct. 6; reported by Dr. Holbrook.

" " " 6; not reported.

" " " 8; not reported.

" " " 8; not reported.

" " " 11; not reported.

" " " 16; not reported.

" " " 19; three physicians and not reported.

Above are seven deaths in October, 1891, from typhoid fever, and but one reported to the Board of Health, either before or after death.

As the above list of deaths was not reported to the Board, notwithstanding the oft-repeated requests that the disease should be reported, they are strongly and unanimously of the opinion that more stringent measures are absolutely necessary, and they have therefore voted the following resolution:

On and after December, 1891. upon the presentation of a death certificate at the office of the Board of Health, the person having died of typhoid fever, in the absence of a previous report of the disease by the attending physician, a warrant will be asked, and if granted, a prosecution will be commenced by the Board in each and every case.

(Signed)

CHARLES R. COSTELLO,

JAMES B. FIELD,

WILLIAM P. LAWLER,

November 25, 1891.

Board of Health.

In the opinion of the Board of Health, typhoid fever is more to be dreaded by the population of Lowell than all the other contagious diseases. It is a disease to which every one is exposed, and so far as we know, immunity from it can only be purchased by submitting to attack. So far as the study of the Board has gone, they have reached the conclusion that so long as the sewage of Manchester, Hooksett, Suncook and Nashua drains into our water supply, we are surrounded by its infection and cannot escape.

The average age for last year seems to have been about maturity, but if up to that period we fortunately escape, we have no assurance of future success in eluding its grasp. Danger is as present with us in the daily routine of our peaceful lives as on the battle-field, only that the embodiment of danger is an invisible and intangible germ, instead of a fast-flying bullet. It flows beside us in the river, in our mains, from the taps in our houses; the germ of disease may not be in this pitcherful or in that, but it will find us some day if we continue to use the water which contains it. About one victim in Lowell is taken daily, and as the average duration of this fever is about a month, there are always thirty persons in this city whose lives are trembling in the balance. Calculate the loss by sickness, the loss of work, the unprofitable work of nursing, and the actual outlay caused by each visitation of the disease, and it will be seen that every possible help should be given by the physicians, instead of refusing to report cases, so that the Health Department may do what little they can to prevent its increase.

All the information possible is gleaned in each case, and made a matter of record at the office of the Board, and the time will come when they will be useful as a basis for study and analysis.

By this means the Board has accurate knowledge of every existing case, and abundant data for enlarging its information whenever

deemed necessary. With the seclusion of the patient and management of the case the Board does not meddle; it strives under all circumstances to avoid any appearance of encroaching upon the rights of the physician, and in the diseases that require isolation, it is left to his judgment whether that seclusion is sufficient to allow members of the family to attend to their usual avocations.

CHOLERA INFANTUM.

The effect of cholera infantum in Lowell's mortality is shown by the following tables. The cause of this increase in infantile mortality in the summer months has been dwelt upon in former reports and need not be referred to here.

DEATHS FROM CHOLERA INFANTUM.

	1891	1890	1889
January	2	1	1
February	2	2	5
March	3	1	0
	—	—	—
Total, first quarter	7	4	6
April	5	5	4
May	7	3	5
June	27	10	36
	—	—	—
Total, second quarter	39	18	45
July	81	82	68
August	57	67	46
September	53	28	32
	—	—	—
Total, third quarter	191	177	146
October	8	13	13
November	6	4	2
December	3	2	3
	—	—	—
Total, fourth quarter	17	19	18
Total for the year	254	218	215

VITAL STATISTICS.

Number of deaths.	1891	1890	1889
Males	948	926	874
Females	1024	1033	1025
Total	1972	1959	1899

Children under one year . . .	589	580	569
“ “ two years . . .	710	703	687
“ “ five years . . .	830	810	811
Per cent. of total deaths under five years	42.1	41.3	42.7

	1891	1890	1889
Diarrhœal diseases under one year	241	202	206
“ “ “ two years	273	233	237
“ “ “ five years	280	237	246
“ “ “ all ages	306	254	269
Per cent. of total deaths from diarrhœal diseases	15.6	12.9	14.1
Per cent. of total deaths from zymotic diseases	32.1	25.9	25.4

Birth-place	Of Deceased.	Of Parents.
Lowell	875	171
Massachusetts, elsewhere	128	213
Other states	241	417
Ireland	378	1,466
Dominion of Canada	241	1,149
Great Britain	81	284
Other countries	13	78
Unknown	15	276
Total	1,972	3,994

PLACE OF DEATH.

Ward 1	251
“ 2	300
“ 3	322
“ 4	242
“ 5	494
“ 6	235
Almshouse	26
St. John's Hospital	68
Lowell Hospital	34
<hr/>	
Total deaths	1,972

PLACES OF INTERMENT.

Catholic Cemetery	1,340
Edson Cemetery	365
Lowell Cemetery	91
Other cemeteries	11
Removed from city	165
<hr/>	
Total	1,972

DEATHS CLASSIFIED.

	1891	1890	1889
Diseases of the nervous system .	245	253	267
“ “ “ circulatory system	150	150	143
“ “ “ respiratory system	294	243	214
“ “ “ digestive system .	90	86	92
“ “ “ genito-urinary sys- tem	73	63	55
All other local diseases . .	15	10	9
<hr/>		<hr/>	<hr/>
Total deaths from local diseases	867	805	780
Total deaths from zymotic dis- eases	461	508	484
Total deaths from constitutional diseases	340	331	336
Total deaths from developmental diseases	257	272	258
Total deaths from violence or unknown causes	47	43	41
<hr/>		<hr/>	<hr/>
Total deaths from all causes .	1,972	1,959	1,899

PRINCIPAL CAUSES OF DEATH.

	1891	1890	1889
Cholera infantum and other diarrhoeal diseases	306	254	269
Phthisis and other tuberculosis	256	253	250
Pneumonia and bronchitis . . .	265	220	195
Infantile debility, marasmus and inanition	155	164	159
Heart disease	156	148	141
Typhoid fever	77	123	65
Apoplexy and paralysis	74	74	69
Old age	61	66	55
Disease of the brain (unclassified)	40	60	64
Convulsions	53	60	63
Diseases of kidneys	66	56	46
Meningitis	65	51	49
Diphtheria and croup	15	41	100
All other causes	383	389	374
Totals	1,972	1,959	1,899

CHOLERA INFANTUM AND DIARRHOEAL DISEASES.

	1891	1890	1889
Phthisis	232	229	229
Cholera infantum	254	218	215
All tuberculosis	256	253	250
All diarrhoeal affections	306	254	269

The figures given above show that in the race for first place in the list of deaths, cholera infantum is first, with consumption a close second.

From the foregoing table of the principal causes of death during the past three years, it is seen that there has been a steady increase in the number of deaths from diarrhoeal diseases and acute lung diseases.

A comparison of 1891, with the preceeding year, is well shown in the following table. It is seen that the decrease in deaths from typhoid fever and diphtheria is more than offset by the increase in cholera infantum, pneumonia and bronchitis.

DEATHS IN 1891.

Increase or decrease as compared with 1890:

	Decrease	Increase.
Cholera infantum and other diarrhoeal diseases	—	52
Phthisis and other tuberculosis	—	3
Pneumonia and bronchitis	—	45
Infantile debility, marasmus and inanition	9	—
Heart disease	—	8
Typhoid fever	46	—
Apoplexy and paralysis	—	—
Old age	5	—
Disease of brain (unclassified)	20	—
Convulsions	7	—
Disease of kidneys	—	10
Meningitis	—	14
Diphtheria and croup	26	—
All other causes	6	—
Totals	119	132
Total increase		13

DEATH RATE.

Population, census of	1880	59,485
.. " "	1885	64,051
.. " "	1890	77,605
" from Jan. 1 to July 1,	1891 (estimated)	79,000
" from July 1 to Jan. 1,	1892 (estimated)	80,400

Year.	Population.	Death rate.
1886	66,761	22.45
1887	69,472	26.94
1888	72,183	24.42
1889	74,894	25.38
1890	77,605	25.24
1891 (6 months)	79,000	
1891 (6 months)	80,400	24.72

The Board this year have taken all possible care to keep down the expenses of the department, and they believe the City of Lowell is getting for the amount expended on pay roll, a full equivalent in the faithful work done by its laborers.

They have, this year, increased the work and the income of the department, and have decreased the expenses by a few hundred-dollars. The City Council and the Citizens of Lowell can see by the following analysis of pay roll and bills, where the appropriation has gone, and the Board believes that nothing has been bought that suggests extravagance or waste. The men must be paid and the horses fed, and about every dollar is absorbed by these two essentials.

ANALYSIS OF PAY ROLL.

1891.

Expended, collection of ashes	\$ 8,011.19
“ “ of swill	6,000 00
“ inspection of milk	546 00
“ “ of plumbing	936 00
“ general inspection	2,119 00
“ office supervision	1,456 00
“ care of horses	728 00
“ watchman	728 00
“ cleaning alleys and care of dumps . .	2,231 00
Total amount of pay-roll	<u>\$22,755.19</u>

BILLS PAID IN 1891.

January	\$ 535.44
February	868.69
March	396.75
April	429.57
May	640.82
June	890.57
July	747.75
August	251.97
September	513.66
October	352.97
November	774.47
December	469.43
Total	<u>\$6,872.09</u>

Hay, oats, straw, corn	\$2,177.24
Repairing wagons and harnesses	650.81
Lumber, shovels, coal, buckets and sundries at stable	524.38
Shoeing horses	245.58
Use of horses from other stables	218.40
New swill wagon	175.00
Horse bought	200.00
New harnesses	50.00
Water, public urinals	68.50
Bath house	413.07
Board of glandered horse	20.00
Rent office, swill and bath houses	589.99
Gas \$90.20, telephone \$139.56, washing office \$50	279.76
Vaccine \$34.92, Vaccination \$261.40	296.32
Legal services and physicians' services	173.00
Stamps, envelopes and printing (office)	350.70
Temperature readings \$122.80, safe \$60	182.80
Milk inspection \$231.79, infected clothing,	
burned \$24.75	256.54
Total	<u>\$6,872.09</u>
Total pay roll 1891	\$22,755.19
" bills "	6,872.09
" salaries "	1,200.00
Total	<u>\$30,827.28</u>
Receipts from swill, manure and horse sold	3,945.57
Appropriations 1891	26,881.71
Receipts "	3,945.57
Total cost "	30,827.28
" " 1890	31,439.86
" " 1889	33,042.66
" " 1888	25,098.84

CONCLUSION.

In concluding, the Board acknowledges the pleasant and harmonious relations existing toward other branches of the City Government, and testifies to the faithful performance of duties by the agent and other officers of the Board.

CHAS. R. COSTELLO,
JAS. B. FIELD,
WM. P. LAWLER.

Jan. 30, 1892.

Board of Health.

Schedule of Property Owned by the City of Lowell in Care of the Board of Health.

Thirteen horses.....	\$2000.00
Eighteen single harnesses.....	400.00
One pair double harnesses.....	10.00
Three surcingles	3.00
Ten horse covers.....	30.00
Ten blankets.....	24.00
Thirty curry combs and brushes.....	10.00
Fourteen halters.....	10.00
Eight single carts.....	450.00
Six swill wagons.....	300.00
Eleven sleds.....	550.00
Two wagons.....	300.00
One hospital wagon.....	50.00
One buggy.....	50.00
One pung.....	60.00
One sleigh.....	25.00
Three wolf robes.....	25.00
Stable and sheds.....	1275.00
Smallpox Hospital and furniture.....	500.00
Bath House and fixtures.....	1500.00
Swill house.....	75.00
<i>Amount carried forward.....</i>	<u>\$7,647.00</u>

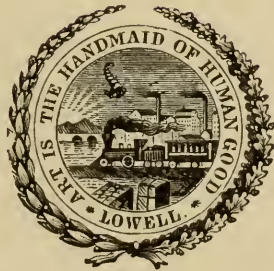
<i>Amount brought forward</i>	\$7,647.00
Two public urinals.....	500.00
Two stoves.....	35.00 ✓
One copper tank.....	6.00
One hundred feet rubber hose.....	10.00
Thirty-five shovels.....	30 00
Twelve ice cutters.....	14.00
Twelve hoes and rakes.....	6.00
Two saws and one hammer.....	2.00
One hay-cutter.....	7.00
Two feed boxes.....	10.00
Office furniture.....	260.00
Two tons hay and twenty-five bushels oats.....	13.00
Six nickel badges.....	7.00
Total.....	<hr/> \$8547.00

MEMBERS OF THE BOARD OF HEALTH.

YEAR.	CHAIRMAN.	OTHER APPOINTED MEMBERS.	CITY PHYSICIANS, EX-OFFICIO.	AGENT AND SUPT. OF HEALTH DEPARTMENT.
1878.....	J. W. B. Shaw.....	Michael Hoar.....	L. Huntress, Jr., M. D..	
1879.....	J. W. B. Shaw.....	Michael Hoar.....	E. W. Trueworthy, M. D.	
1880.....	J. W. B. Shaw.....	Michael Hoar.....	E. W. Trueworthy, M. D.	
1881.....	J. W. B. Shaw.....	Nathan Allen, M. D....	E. W. Trueworthy, M. D.	
1882.....	J. W. B. Shaw.....	Nathan Allen, M. D....	W. G. Eaton, Jr., M. D.	Frederick A. Bates.
1883.	J. W. B. Shaw	Wm. M. Hoar, M. D....	W. G. Eaton, Jr., M. D.	Frederick A. Bates.
1884.....	Wm. M. Hoar, M. D....	James J. McCarty, M. D.	W. G. Eaton, Jr., M. D.	Frederick A. Bates.
1885.....	J. W. B. Shaw	James J. McCarty, M. D.	John J. Colton, M. D....	Frederick A. Bates.
1886.....	J. W. B. Shaw	Nathan Allen, M. D....	John J. Colton, M. D....	Frederick A. Bates.
1887.....	Nathan Allen, M. D....	Charles R. Costello.....	John J. Colton, M. D....	Frederick A. Bates.
1888.....	James B. Field, M. D..	Charles R. Costello.....	J. Arthur Gage, M. D..	Frederick A. Bates.
1889.....	James B. Field, M. D..	Charles R. Costello.....	J. Arthur Gage, M. D..	Frederick A. Bates.
1890.....	James B. Field, M. D..	Charles R. Costello.....	J. Arthur Gage, M. D..	Frederick A. Bates.
1891.....	Charles R. Costello.....	James B. Field, M. D....	Wm. P. Lawler, M. D..	H. H. Knapp.

ANNUAL REPORT
OF THE
INSPECTOR OF MILK AND VINEGAR,
OF THE
CITY OF LOWELL,

FROM JANUARY 23, TO DECEMBER 31, 1891.



LOWELL, MASS.:
CAMPBELL & HANSCOM, PRINTERS.
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, January 9, 1892.

Received and ordered on file.

MICHAEL J. DOWD, *City Clerk*.

REPORT.

*To His Honor the Mayor, and the Board of Aldermen of
the City of Lowell:*

I have the honor to submit my first report as Inspector of Milk and Vinegar.

The work of the department has been extended and enlarged during the year by the fitting up of a laboratory for the chemical analysis of milk, butter, etc. Since the fifteenth of May all samples of milk taken, and many that have been brought in, have been chemically analyzed.

The duties of the inspector, as defined by statutes under which he acts, are the issuing of licenses, the registration of stores where milk or oleomargarine is sold, collection and inspection of samples, and the enforcement of the laws in the courts.

The statistics of the office and the details of the work performed will be found under the proper headings.

LICENSES.

The statutes require the milk inspector to license every person who conveys milk or oleomargarine, in carriages or otherwise, for the purpose of selling the same, annually on the first day of May, or within thirty days thereafter, and they shall pay fifty cents to the use of the city.

The statutes also require all stores, booths, stands, or market places, before selling milk or oleomargarine, to register in the books of the inspector and pay fifty cents, which fee is paid but once. Licenses are issued only in the name of owners, and may not be sold, assigned, or transferred. Each license records the name, residence, place of business, number of carriages, or other vehicles used, the name and residence of every driver or other person engaged in the carrying or selling, and the number of the license. The licensee is required to cause his name, the number of his license and his place of business, to be legibly placed on each outer side of all carriages or vehicles used by him in the sale and conveyance of milk or of oleomargarine, and to report to the inspector any change of driver or other person employed; for failure to comply with these requirements, or for selling or exposing for sale from carriage or other vehicles, without first being licensed, a fine of not less than thirty nor more than one hundred dollars may be imposed; for a second offence heavier penalties may be imposed. Failure to register for the sale of milk or of oleomargarine, from store, booth, stand, or market place, is punishable by a fine of not exceeding twenty dollars.

Number of licenses issued to dealers conveying milk by carriage or otherwise for purposes of sale . . .	163
Number of registrations of store-keepers engaged in the sale of milk	120
Number of licenses issued for the sale of oleomargarine,	14
<hr/>	
Total number of licenses and registrations . . .	297
Amount of money received for same and turned over to the city treasurer	\$148.50

LABORATORY.

The present inspector had been in office but a very few days when an attempt was made to bribe him by handing him a package containing two hundred and fifty dollars in money, and a list of eleven names, written by one hand. The names on the list were all milkmen doing business in Lowell. The attention of His Honor the Mayor, and the Board of Health was called to the matter, and it was decided to prosecute the man who handed the package to the inspector. A warrant was sworn out, the case went to the grand jury, where a bill was found, and the case is still pending in the courts.

In view of the facts, on the suggestion of His Honor the Mayor, and with the co-operation of the Board of Health, it was decided to fit up a laboratory for the chemical examination of milk, butter, etc. Rooms Nos. 8 and 9 in Irvine block were engaged, and all the latest apparatus for the chemical analysis of milk was purchased. The inspector took a special course of instruction in the laboratory of Dr. B. F. Davenport, state chemist, of Boston. The work was completed and ready for operation on the fifteenth day of May. Since that time, all samples collected, and many that have been brought in, have been chemically analyzed.

INSPECTION.

It is the duty of the inspector to enter all places where milk is stored or kept for sale, and take samples for analysis. It is the custom of the inspector to take samples from wagons and stores in about the same proportion. There are also a great many samples brought in by citizens, which are analyzed free of charge.

In most instances where milk taken from stores has not been up to the legal standard, warnings have been issued, and in almost every case they caused an improvement in the quality of milk sold. It is the custom to pay for milk taken from stores, but not that taken from wagons.

Total number milk inspections	. . .	1,300
Total number warnings sent	. . .	81

COMPLAINTS.

THE STATUTES PROVIDE PENALTIES

For neglecting or refusing to license or register for the sale of milk.

For selling, or exposing for sale, adulterated milk, milk not of standard quality, milk to which water or any foreign substance has been added, milk produced from sick or diseased cows, or milk produced from cows fed on the refuse of distilleries.

For selling, or offering for sale, as pure milk, milk from which the whole or any part of the cream has been removed.

For selling skimmed milk, unless from cans or other vessels marked as required by statute.

For selling, exposing for sale, or possessing with intent to sell, milk or skimmed milk which is not of standard quality, *i. e.*, containing less than thirteen per cent. of milk solids, in the case of whole milk; or less than nine and three-tenths per cent. of milk solids, exclusive of fat, in case of skimmed milk.

For obstructing in any manner the milk inspector or his assistants in the performance of their duties.

For neglecting or refusing to license or register for the sale of oleomargarine, butterine, etc.

For selling, exposing for sale, or possessing with intent to sell, oleomargarine, butterine, imitation butter, or imitation cheese, unless marked as required by statute.

For selling, exposing for sale, or possessing with intent to sell, oleomargarine, butterine, etc., containing any coloring matter that causes it to look like butter.

For the sale, or exposure for sale, as cider vinegar, vinegar which is not made exclusively of apple cider.

For the sale, or exposure for sale, of vinegar containing any artificial coloring matter, or containing any preparation of lead, copper, sulphuric acid, or any ingredient injurious to health.

For the sale of any vinegar not of standard quality, *i. e.*, containing less than four and one-half per cent. of absolute acetic acid, or, in the case of cider vinegar, containing less than two per cent., by weight, of cider vinegar solids.

It is the duty of the inspector to make complaint for any of the offences thus enumerated which may be brought to his notice as the result of his analysis of samples, or on the information of any person who lays before him satisfactory evidence upon which to sustain such complaint.

CONVICTIONS.

Number of convictions for having in his possession with intent to sell, milk not of good standard quality .	10
For obstructing the inspector in the discharge of his duty	1
For selling milk without a license	1

The following is the standing of milk on which complaints have been made:

MILK SOLIDS.	SOLIDS NOT FAT.	FAT.	ASH.
9.92 per cent.	7.48 per cent.	2.44 per cent.	.58 per cent.
10.20 ..	7.90 ..	2.30 ..	.52 ..
10.66 ..	7.92 ..	2.74 ..	.50 ..
11.06 ..	8.08 ..	2.98 ..	... ..
11.26 ..	8.68 ..	2.58 ..	... ..
11.42 ..	8.38 ..	3.04 ..	.60 ..
11.44 ..	8.76 ..	2.68 ..	.64 ..
11.54 ..	8.38 ..	3.16 ..	.50 ..
11.74 ..	8.92 ..	2.82 ..	.62 ..
11.94 ..	8.70 ..	3.24 ..	.64 ..

As a result of these cases there has been paid in fines, \$750.00

SUPPLY.

The supply of milk used in Lowell comes mostly from the surrounding towns, with one car per day by rail.

Number of milk routes in Lowell	.	.	.	127
Routes from one to five cans	.	.	.	25
" " five to ten cans	.	.	.	7
" " ten to twenty cans	.	.	.	16
" " twenty to thirty cans	.	.	.	25
" " thirty to forty cans	.	.	.	20
" " forty to fifty cans	.	.	.	17
" " fifty cans and over	.	.	.	17

SOURCE OF SUPPLY.

Of the milk sold in Lowell about nineteen per cent. is raised by the milkmen supplying it. It comes from the following places :

Raised in Lowell	.	.	.	188	cans	per	day.
" Tewksbury	.	.	.	318	"	"	"
" Dracut	.	.	.	675	"	"	"
" Pelham	.	.	.	277	"	"	"
" Tyngsboro	.	.	.	222	"	"	"
" Chelmsford	.	.	.	410	"	"	"
" Westford	.	.	.	164	"	"	"
" Dunstable	.	.	.	45	"	"	"
" Billerica	.	.	.	228	"	"	"
" Carlisle	.	.	.	50	"	"	"
" Windham	.	.	.	30	"	"	"
" Hudson	.	.	.	11	"	"	"
" Nashua	.	.	.	16	"	"	"
" Andover	.	.	.	23	"	"	"
Comes on railroad	.	.	.	836	"	"	"

About one hundred and seventy-five cans of skimmed milk, and in the summer about the same amount of buttermilk, are sold daily.

The above figures are taken from the milkmen at the time of the renewal of their license in May.

Estimated number of quarts of milk sold in Lowell	
per day	29,690
Estimated number quarts sold to hotels and board-	
ing houses	11,908
Estimated number quarts sold to families	17,782
Estimated number gallons sold during the year	2,709,030
Estimated cost of milk to consumers, per year	\$541,806
Estimated cost per capita	\$6.77 $\frac{1}{4}$

EXPENSES.

Salary of inspector	\$300.00
For fitting up laboratory and office	532.11
printing notices	35.00
postage	1.76
stationery	6.00
samples purchased	9.18
Chemicals "	7.24
expenses	42.40
	<hr/>
	\$933.69

INCOME.

From milk licenses	\$ 81.50
milk registration	60.00
oleomargarine licenses	7.00
finer, as result of prosecutions	750.00
	<hr/>
Total	\$898.50

The fitting up the laboratory is a permanent investment, and will not have to be met another year.

THE MILK STANDARD.

There has been so much said about the standard of milk being too high that I take the liberty of quoting from the report of Dr. J. F. Babcock, milk inspector of Boston in 1886. He says:

"No one can fairly object to a law which requires a food product, and especially one of the importance of milk, to be of *good standard quality*. No one who purchased a bushel of potatoes would be satisfied if they were not of average size, and no purchaser who had been cheated by small potatoes would be satisfied if told that they grew on as fine a piece

of land as is to be found in the state. In like manner a purchaser of milk expects, and has a right to expect, that the article furnished shall be at least of *average* quality; he has no right to expect Jersey milk with its possible eighteen and twenty per cent. of milk solids; nor, on the other hand, ought he to be compelled to receive whatever a milk-dealer may choose to give him, no matter how poor the quality, simply because it happened to be pure and 'just as it came from the cow,' for it is well known that by certain methods of feeding, the flow of milk may be greatly increased, while the quality of the product is correspondingly depreciated.

"In view of these facts the legislature has enacted that milk, if sold, must be of good standard quality, and that standard quality means not less than thirteen per cent. of milk solids (except during May and June, when twelve per cent. of milk solids is made the standard).

"Is this a fair standard? The universal testimony of all the leading authorities of the world agree that it is. During the year 1886, the State Board of Health, Lunacy and Charity instituted an inquiry relative to the quality of milk produced in Massachusetts and reported, as the result of the analysis of the milk of 601 cows, as follows:

Average solids of samples from 209 single animals .	13.21
Average solids of all samples of milk from public institutions, mixed and single (175 animals) . . .	13.00
Average solids of all samples of milk obtained from private farms, mixed and single (426 animals) .	13.36
Average solids of all samples of mixed milk, and milk of single animals, from all sources (601 animals)	13.26

Dr. Samuel W. Abbott, health officer of the board, in his report giving the above figures, says:

"The samples were produced in eight different counties of the state, including the two largest milk-producing counties (Middlesex and Worcester), and, considering the varying conditions of

production, such as breed, age, time of day, and the season of the year, character of feed, and other modifying circumstances, the results obtained—13.36 per cent. of total solids—may be fairly considered as an average of the present milk product as furnished by the 150,000 milch cows of Massachusetts. The difference in quality of the milk obtained from public institutions cannot materially affect this result, since the ratio of animals owned by them is less than one per cent. of the entire number in the state.”

SKIMMED MILK.

The statutes provide that when milk, from which any part of the cream has been removed, is sold, or kept for sale, the vessel containing it shall be distinctly marked, in a conspicuous place above the center, with the words, *Skimmed Milk*, in uncondensed *Gothic letters* not less than one inch in length. This law, as a rule, has been complied with. The skimmed milk sold in Lowell has been handled mostly by one man, who has a large trade in supplying boarding houses. The supply comes mostly on the cars, from D. Whiting & Sons, and has been found on analysis to be an excellent quality of skimmed milk.

In some cases milk taken from cans marked, “Skimmed Milk,” has been found to be watered milk, but this fraud is not very much practiced, and less now than in the earlier part of the year.

VINEGAR.

The quality of the vinegar sold in Lowell is very good. The manufacturers have kept it up to the standard required by law, and most of the samples tested have come up to that standard. There have been no complaints made to the inspector.

OLEOMARGARINE.

There have been eleven licenses issued to individuals and firms, for the sale of oleomargarine and butterine, during the year. At the last session of the legislature, two bills were passed in relation to oleomargarine. One approved March 10, directed the milk inspector to institute complaints for violation of the law against color (the laws will be found in the Appendix). Before the law went into effect, September 1, the inspector visited all places where licenses had been issued, and found the sale of the product had been stopped for the time. Very soon an oleomargarine was put on the market here called *non-colored*, which has had, and is having quite an extensive sale.

The inspector has no reason to doubt that it is what it is said to be, free from artificial coloring matter.

From information obtained from dealers, there is from 20,000 to 25,000 lbs. of oleomargarine, sold in Lowell every month. The average price the past year has been about sixteen cents per lb.

I take this opportunity to thank His Honor, Geo. W. Fifield, the agent, and members of the Board of Health, for the encouragement and assistance they have given me in the discharge of my duties.

Respectfully submitted,

THOS. O. ALLEN,
Inspector of Milk and Vinegar.

THE LAWS OF MASSACHUSETTS

RELATING TO THE

SALE AND INSPECTION OF MILK.

[CHAPTER 57, PUBLIC STATUTES.]

SECTION 1. The mayor and aldermen of cities shall, and the selectmen of towns may, annually appoint one or more persons to be inspectors of milk for their respective places, who shall be sworn before entering upon the duties of their office. Each inspector shall publish a notice of his appointment for two weeks in a newspaper published in his city or town, or, if no newspaper is published therein, he shall post up such notice in two or more public places in such city or town.

SECT. 2. (*As amended by Section 1 of Chapter 318 of the Acts of 1886.*) Such inspectors shall keep an office, and shall record in books kept for the purpose the names and places of business of all persons engaged in the sale of milk within their city or town. Said inspectors may, with the approval of the mayor or the selectmen, employ suitable persons to act as collectors of samples, who shall be sworn before entering upon their duties. Said inspectors, or the collectors employed and qualified as aforesaid, may enter all places where milk is stored or kept for sale, and all carriages used for the conveyance of milk, and the said inspectors or the collectors may take samples for analysis from all such places or carriages, and at the same time a portion of each sample so taken shall, if the person taking the same be requested so to do, be sealed and delivered to the owner or person from whose possession the same is

taken, and a receipt given therefor to the person taking the same. The inspectors shall cause the samples of milk so taken to be analyzed or otherwise satisfactorily tested, the result of such analysis or test they shall record and preserve as evidence. The inspectors shall receive such compensation as the mayor or aldermen or selectmen may determine.

SECT. 3. In all cities and in all towns in which there is an inspector of milk, every person who conveys milk in carriages or otherwise, for the purpose of selling the same in such city or town, shall annually, on the first day of May, or within thirty days thereafter, be licensed by the inspector or inspectors of milk of such city or town to sell milk within the limits thereof, and shall pay to such inspector or inspectors fifty cents each to the use of the city or town. The inspector or inspectors shall pay over monthly to the treasurer of such city or town all sums collected by him or them. Licenses shall be issued only in the names of the owners of carriages or other vehicles, and shall, for the purposes of this chapter, be conclusive evidence of ownership. No license shall be sold, assigned, or transferred. Each license shall record the name, residence, place of business, number of carriages or other vehicles used, the name and residence of every driver or other person engaged in carrying or selling said milk, and the number of the license. Each licensee shall, before engaging in the sale of milk, cause his name, the number of his license, and his place of business, to be legibly placed on each outer side of all carriages or vehicles used by him in the conveyance and sale of milk, and he shall report to the inspector or inspectors any change of driver or other person employed by him which may occur during the term of his license. Whoever, without being first licensed under the provisions of this section, sells milk or exposes it for sale from carriages or other vehicles, or has it in his custody or possession with intent so to sell, and whoever violates any of the provisions of this section, shall, for a first offence, be punished by fine of not less than thirty nor more than one hundred dollars; for a second offence, by fine of not less than fifty nor more than three hundred dollars; and for a subsequent offence, by fine of fifty dollars and by imprisonment in the house of correction for not less than thirty nor more than sixty days.

SECT. 4. Every person before selling milk or offering it for sale in a store, booth, stand, or market-place in a city or in a town in which an inspector or inspectors of milk are appointed, shall register in the books of such inspector or inspectors, and shall pay to him or them fifty cents to the use of such city or town; and whoever neglects so to register shall be punished for each offence by fine not exceeding twenty dollars.

SECT. 5. (*As amended by Section 2 of Chapter 313 of the Acts of 1886.*) Whoever, by himself or by his servant or agent or as the servant or agent of any other person, sells, exchanges, or delivers, or has in his custody or possession with intent to sell or exchange, or exposes or offers for sale or exchange, adulterated milk, or milk to which water or any foreign substance has been added, or milk produced from cows fed on the refuse of distilleries, or from sick or diseased cows, or milk not of good standard quality, shall, for a first offence, be punished by fine of not less than fifty nor more than two hundred dollars; for a second offence, by fine of not less than one hundred nor more than three hundred dollars, or by imprisonment in the house of correction for not less than thirty nor more than sixty days; and for a subsequent offence, by fine of fifty dollars and by imprisonment in the house of correction for not less than sixty nor more than ninety days.

SECT. 6. Whoever, by himself or by his servant or agent, or as the servant or agent of any other person, sells, exchanges, or delivers, or has in his custody or possession with intent to sell or exchange, or exposes or offers for sale as pure milk, any milk from which the cream or a part thereof has been removed, shall be punished by the penalties provided in the preceding section.

SECT. 7. (*As amended by Chapter 352, Acts of 1885.*) No dealer in milk, and no servant or agent of such a dealer, shall sell, exchange, or deliver, or have in his custody or possession with intent to sell, exchange, or deliver, milk from which the cream or any part thereof has been removed, unless in a conspicuous place above the centre upon the outside of every vessel, can, or package from or in which such milk is sold the words "**Skimmed Milk**" are distinctly marked in uncondensed Gothic letters not less than one inch in length. Whoever violates

the provisions of this section shall be punished by the penalties provided in section five.

SECT. 8. (*As amended by Chapter 310, Acts of 1884.*) Any inspector of milk, and any servant or agent of an inspector who wilfully connives at or assists in a violation of the provisions of this chapter, and whoever hinders, obstructs, or in any way interferes with any inspector of milk, or any servant or agent of an inspector in the performance of his duty, shall be punished by fine of not less than one hundred nor more than three hundred dollars, or by imprisonment for not less than thirty nor more than sixty days.

SECT. 9. (*As amended by Section 2 of Chapter 318 of the Acts of 1886.*) In all prosecutions under this chapter, if the milk is shown upon analysis to contain more than eighty-seven per cent. of watery fluid, or to contain less than thirteen per cent. of milk solids, or to contain less than nine and three-tenths per cent. of milk solids exclusive of fat, it shall be deemed for the purpose of this act to be not of good standard quality, except during the months of May and June, when milk containing less than twelve per cent. of milk solids shall be deemed to be not of good standard quality.

SECT. 10. It shall be the duty of every inspector to institute a complaint for a violation of any of the provisions of this chapter on the information of any person who lays before him satisfactory evidence by which to sustain such complaint.

SECT. 11. Each inspector shall cause the name and place of business of every person convicted of selling adulterated milk, or of having the same in his possession with intent to sell, to be published in two newspapers in the county in which the offence was committed.

SECT. 12. (*Section 8 of Chapter 352 of the Acts of 1885.*) No person shall sell, exchange, or deliver, or have in his custody or possession with intent to sell, exchange, or deliver, skimmed milk containing less than nine and three-tenths per cent. of milk solids exclusive of fat. Whoever violates the provisions of this section shall be punished by the penalties provided in section five of chapter fifty-seven of the Public Statutes.

SECT. 13. (*Section 3 of Chapter 318 of the Acts of 1886.*) If the said inspector or collector, after being so requested, shall refuse or neglect to seal and deliver to the owner or person

from whose possession the same is taken, as provided in section 2, a portion of the sample taken as aforesaid, no evidence shall be received in any court of the results of the analysis or test of the same, which may have been recorded and preserved as aforesaid.

SECT. 14. (*Section 4 of Chapter 318 of the Acts of 1886.*) Whoever makes, uses, or has in his possession any imitation or counterfeit of any seal used by any milk inspector or his agents, and whoever changes, or in any manner tampers with, any sample taken or sealed as provided in section 2. shall be punished by fine not exceeding fifty dollars, or by imprisonment in the house of correction not exceeding ninety days.

LAWS OF MASSACHUSETTS

RELATING TO THE

INSPECTION AND SALE OF OLEOMARGARINE

[SECTIONS 17, 18, 19, 20, AND 21 OF CHAP. 56 OF THE PUBLIC STATUTES, AS AMENDED BY CHAP. 310 OF THE ACTS OF 1884, AND CHAP. 352, ACTS OF 1885, AND CHAP. 317 OF THE ACTS OF 1886.]

SECTION 17. (*As amended by Section 1 of Chapter 317 of the Acts of 1886.*) Whoever, by himself or his agents, sells, exposes for sale, or has in his possession with intent to sell, any article, substance, or compound, made in imitation or semblance of butter or as a substitute for butter, and not made exclusively and wholly of milk or cream, or containing any fats, oils, or grease not produced from milk or cream, shall have the words "**Imitation Butter,**" or if such substitute is the compound known as "**Oleomargarine,**" then the word "**Oleomargarine,**" or, if it is known as "**Butterine,**" then the word "**Butterine,**" stamped, labelled, or marked, in a straight line, in printed letters of plain, uncondensed Gothic type, not less than one-half inch in length, so that said words cannot be easily defaced, upon the top, side, and bottom of every tub, firkin, box, or package containing any of the said article, substance, or compound. The said stamp, label, or mark shall contain no other words. And whoever, by himself, or his agents, exposes or offers for sale any

of the said article, substance, or compound not in the original package, shall attach to the said article, substance, or compound, in a conspicuous place, a label bearing the words "**Imitation Butter.**" "**Oleomargarine,**" or "**Butterine,**" as the article may be, in printed letters of plain, uncondensed Gothic type, not less than one-half inch in length. And in cases of retail sales of any of said article, substance, or compound not in the original packages, the seller shall, by himself or his agents, attach to each package so sold, and shall deliver therewith to the purchaser, a label or wrapper bearing in a conspicuous place, upon the outside of the package, the words "**Imitation Butter,**" "**Oleomargarine,**" or "**Butterine,**" and no other words, in printed letters, in a straight line of plain, uncondensed Gothic type, not less than one-half inch in length.

SECT. 18. Whosoever, by himself or his agent, sells, exposes for sale, or has in his possession with intent to sell, any article, substance, or compound made in imitation or semblance of cheese, or as a substitute for cheese, and not made exclusively and wholly of milk or cream, or containing any fats, oils, or grease not produced from milk or cream, shall have the words "**Imitation Cheese,**" stamped, labelled, or marked, in printed letters of plain, uncondensed Gothic type, not less than one inch in length, so that the words cannot easily be defaced, upon the side of every cheese-cloth or band around the same, and upon the top and side of every tub, firkin, box, or package containing any of said article, substance, or compound. And in case of retail sales of any of said article, substance, or compound not in the original package, the seller shall, by himself or his agent, attach to each package so sold, and shall deliver therewith to the purchaser, a label or wrapper bearing in a conspicuous place upon the outside of the package the words "**Imitation Cheese,**" in printed letters of plain, uncondensed Gothic type, not less than one inch in length.

SECT. 19. (*As amended by Section 2 of Chapter 317 of the Acts of 1886.*) Whoever sells, exposes for sale, or has in his possession with intent to sell, any article, substance, or compound made in imitation or semblance of butter or cheese, or as a substitute for butter or cheese, except as provided in the two preceding sections, and whoever, with intent to deceive,

defaces, erases, cancels, or removes any mark, stamp, brand, label, or wrapper provided for in such sections, or in any manner shall falsely label, stamp, or mark any box, tub, article, or package marked, stamped, or labelled as aforesaid, shall for every such offence forfeit to the city or town where the offence was committed one hundred dollars, and for a second and each subsequent offence two hundred dollars.

SECT. 20. Inspectors of milk shall institute complaints for violations of the provisions of the three preceding sections when they have reasonable cause to believe that such provisions have been violated, and on the information of any person who lays before them satisfactory evidence by which to sustain such complaint. Said inspectors may enter all places where butter or cheese is stored or kept for sale, and said inspectors shall also take specimens of suspected butter or cheese, and cause them to be analyzed or otherwise satisfactorily tested, the result of which analysis or test they shall record and preserve as evidence; and a certificate of such results, sworn to by the analyzer, shall be admitted in evidence in all prosecutions under this and three preceding sections. The expense of such analysis or test, not exceeding twenty dollars in any one case, may be included in the costs of such prosecutions. Whoever hinders, obstructs, or in any way interferes with any inspector, or any agent of an inspector, in the performance of his duty, shall be punished by a fine of fifty dollars for the first offence, and of one hundred dollars for each subsequent offence.

SECT. 21. For the purposes of the four preceding sections the terms "butter" and "cheese" shall mean the products which are usually known by these names, and are manufactured exclusively from milk or cream, with salt and rennet, and with or without coloring matter.

[CHAPTER 317 OF THE ACTS OF 1886.]

SECTION 3. Whoever, by himself or his agents, sells, exposes for sale, or has in his possession with intent to sell, any article, substance, or compound made in imitation or semblance of butter, or as a substitute for butter, and not made exclusively and wholly of milk or cream, or containing any fats, oils, or

grease not produced from milk or cream, contained in any box, tub, article, or package marked or labelled with the word "dairy" or the word "creamery," shall for every such offence forfeit to the city or town where the offence was committed one hundred dollars, and for a second and each subsequent offence two hundred dollars.

SECT. 4. Every person who conveys any imitation butter, oleomargarine, or butterine in carriages or otherwise, for the purpose of selling the same in any city or town, shall, within thirty days of the passage of this act, and annually on the first day of May, or within thirty days thereafter, be licensed by the inspector or inspectors of milk of such city or town, to sell the same within the limits thereof, and shall pay to such inspector or inspectors fifty cents to the use of the city or town. The inspector or inspectors shall pay over monthly to the treasurer of such city or town all sums collected by him or them. In towns in which there is no inspector of milk, licenses shall be issued by the town clerk. Licenses shall be issued only in the names of the owners of carriages or other vehicles, and shall for the purposes of this chapter, be conclusive evidence of ownership. No license shall be sold, assigned, or transferred. Each license shall record the name, residence, place of business, number of carriages or other vehicles used, the name and residence of every driver or other person engaged in carrying or selling imitation butter, oleomargarine, or butterine, and the number of the license. Each licensee shall, before engaging in the sale of any of the articles as aforesaid, cause his name, the number of his license, his place of business, to be legibly placed on each outer side of all carriages or vehicles used by him in the conveyance and sale of the articles as aforesaid, in Gothic letters, not less than one inch in length, and he shall report to the inspector or inspectors any change of driver or other person employed by him which may occur during the term of his license. Whoever, without being first licensed under the provisions of this section, sells any of the articles as aforesaid, or exposes or offers them for sale from carriages or other vehicles, or has them in his custody or possession with intent so to sell, and whoever violates any of the provisions of this section, shall, for the first offence, be punished by fine of not less than thirty nor more than one

hundred dollars; for a second offence, by a fine of not less than fifty nor more than three hundred dollars.

SECT. 5. Every person, before selling or offering for sale any of the articles as aforesaid in a store, booth, stand, or market-place in a city or in a town in which an inspector or inspectors of milk are appointed, shall within thirty days of the passage of this act, and annually on the first day of May or within thirty days thereafter, register in the books of such inspector or inspectors, or if there be no inspector then in the books of the town clerk, and shall pay to him or them fifty cents to the use of such city or town; and whoever neglects to so register shall be punished for each offence by a fine not exceeding twenty dollars.

[CHAP. 58.]

AN ACT TO PREVENT DECEPTION IN THE MANUFACTURE AND SALE
OF IMITATION BUTTER.

Be it enacted, etc., as follows:

SECTION 1. No person, by himself or his agents or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product, or compound made wholly or partly out of any fat, oil, or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be an imitation of yellow butter produced from pure unadulterated milk or cream of the same; *provided*, that nothing in this act shall be construed to prohibit the manufacture or sale of oleo-margarine in a separate and distinct form and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter.

SECT. 2. Whoever violates any of the provisions of section one of this act shall be punished by a fine of not less than one hundred dollars nor more than five hundred dollars, or by imprisonment in the house of correction for a term not exceeding one year.

SECT. 3. Inspectors of milk shall institute complaints for the violation of the provisions of this act when they have reason-

able cause to believe that any of its provisions have been violated; and on the information of any person who lays before them satisfactory evidence by which to sustain such complaint, said inspectors may enter all places where butter or imitations thereof are stored or kept for sale, and shall also take specimens of suspected butter and imitations thereof and cause them to be analyzed or otherwise satisfactorily tested, the result of which analysis or test they shall record and preserve as evidence; and a certificate of such result sworn to by the analyzer shall be admitted in evidence in all prosecutions under this act. The expense of such analysis or test, not exceeding twenty dollars in any one case, may be included in the costs of such prosecutions. Whoever hinders, obstructs, or in any way interferes with any inspector in the performance of his duty shall be punished by a fine of fifty dollars for the first offence and of one hundred dollars for each subsequent offence.

SECT. 4. This act shall not be construed to impair or prevent the prosecution and punishment of any violation of laws existing at the time of its passage and committed prior to its taking effect.

SECT. 5. This act shall take effect on the first day of September next. [*Approved March 10, 1891.*]

[CHAP. 412.]

AN ACT TO PROVIDE FOR THE PROTECTION OF DAIRY PRODUCTS
AND TO ESTABLISH A STATE DAIRY BUREAU.

Be it enacted, etc., as follows:

SECTION 1. Whoever sells or offers for sale, to any person who asks, sends or inquires for butter, any oleomargarine, butterine or any substance made in imitation of or semblance of pure butter, not made entirely from the milk of cows, with or without coloring matter, shall be declared guilty of fraud and punished by a fine of not less than one hundred dollars for each offence.

SECT. 2. Whoever exposes for sale oleomargarine, butterine or any substance made in imitation or semblance of pure butter, not marked and distinguished by all the marks, words and stamps required by existing laws, and not having in addition thereto upon every open tub, package or parcel thereof a placard

with the word "oleomargarine" printed thereon in plain, uncondensed Gothic letters, not less than one inch long, shall be fined not less than one hundred dollars for each offence.

SECT. 3. Whoever sells oleomargarine, butterine or any other substance made in imitation or semblance of pure butter, from any dwelling, store, office or public mart shall have conspicuously posted thereon the placard or sign, in letters not less than four inches in length, "oleomargarine sold here," or "butterine sold here." Said placard to be approved by the bureau hereinafter provided for by this act. Any person neglecting or failing to post the placard herein provided for shall be punished by a fine of not less than one hundred dollars for the first offence and one hundred dollars for each day's neglect thereafter.

SECT. 4. Whoever peddles, sells or delivers from any cart, wagon or other vehicle, upon the public streets or ways, oleomargarine, butterine or any substance made in imitation or semblance of pure butter, not having on both sides of said cart, wagon or other vehicle the placard in uncondensed Gothic letters, not less than three inches in length, "licensed to sell oleomargarine," shall be punished by a fine of not less than one hundred dollars or imprisonment for not less than thirty days for each offence.

SECT. 5. Whoever furnishes, or causes to be furnished, in any hotel, restaurant or at any lunch counter, oleomargarine or butterine to any guest or patron of such hotel, restaurant or lunch counter, in the place or stead of butter shall notify said guest or patron that the substance so furnished is not butter, and any party so furnishing without such notice shall be punished by a fine of not less than ten nor more than fifty dollars for each offence.

SECT. 6. The governor, by and with the consent of the council, shall appoint an assistant to the secretary of the board of agriculture, at an annual salary of twelve hundred dollars, and expenses necessarily incurred in the discharge of his duties, to assist in the work prescribed in the eleventh section of this act. Said appointee shall hold office for two years or till his successor is appointed, unless sooner removed from office by the governor, and his successor shall be appointed as above provided for.

SECT. 7. In order to secure the better enforcement of the provisions of this act and to promote the improvement of the products of the dairy, the governor, by and with the advice and consent of the council, shall appoint three members of the board of agriculture, to constitute a dairy bureau of said board, one to serve for three years, one for two years and one for one year from the first day of July in the year eighteen hundred and ninety-one, or for such shorter terms respectively as they may continue to be members of said board of agriculture; and, prior to the first day of July in each succeeding year, the governor shall appoint from said board one member of said bureau to serve for three years or for such shorter term, as aforesaid. No person shall continue to be a member of said bureau after he has ceased to be a member of said board, but, on his ceasing to be a member of said board, his place on said bureau shall be filled by the appointment of another member of said board, as aforesaid. The secretary of said board shall be the executive officer of said bureau subject to its control and direction, and said secretary shall, upon assuming said duties, receive, in addition to his present salary, five hundred dollars per annum. The governor may at any time terminate the service of any member of said board as a member of said bureau and may appoint any other member of said board in his place, as above provided. Members of said bureau shall serve without pay and shall have power to enforce all laws relating to dairy products and imitations thereof, and to employ such agents, assistants, experts, chemists or counsel as may be necessary therefor. Said bureau, in the discharge of its duties, shall be subject to the general direction and control of the board of agriculture.

SECT. 8. The bureau may expend a sum not exceeding four thousand dollars in carrying forward the work of the bureau, and shall make annual reports in detail to the legislature, not later than the fifteenth day of January in each year, of the number of assistants, experts, chemists, agents and counsel employed, and their expenses and disbursements, with such other information as shall be for the advantage of the dairy interests in the state, and they shall make full reports of all investigations made by them with all cases prosecuted and the results of such prosecution. They shall make detailed state-

ments of the said expenses to the auditor of the Commonwealth, on which payment shall be made to the extent of the appropriation.

SECT. 9. Said bureau and such agents and counsel as they shall duly authorize for that purpose shall have access, ingress and egress to and from all places of business, factories, buildings, carriages and cars, used in the manufacture and sale of any dairy products, or imitation dairy products, and shall have access to all vessels and cans used in such manufacture and sale, and shall have all the authority given by law to the state board of health and any officer thereof, and to the milk inspectors, in the enforcement of all laws relating to dairy products or imitations thereof, and in the prosecutions of violations of said laws.

SECT. 10. The said bureau may work in unison with the state board of health, and with inspectors of milk, but they shall not restrict, limit or interfere with the duties of said officers. Nothing herein contained shall be held to circumscribe the rights of said bureau in the prosecution of offenders of the so-called dairy laws or all laws relating to milk, butter, cheese or any adulterations or imitations thereof wherever found within the Commonwealth.

SECT. 11. It shall be the duty of the said bureau to investigate all dairy products and imitation dairy products bought or sold within the Commonwealth; to enforce all laws for the manufacture, transfer and sale of all dairy products and all imitation dairy products within the Commonwealth, with all the powers needed for the same; to investigate all methods of butter and cheese making in cheese factories or creameries, and to disseminate such information as shall be of service to producing a more uniform dairy product of higher grade and better quality.

SECT. 12. All fines recovered under this act shall be payable to the treasury of the Commonwealth.

SECT. 13. This act shall take effect on the first day of September in the year eighteen hundred and ninety-one. [*Approved June 11, 1891.*]

LAWS OF MASSACHUSETTS

RELATIVE TO THE

INSPECTION AND SALE OF VINEGAR

PUBLIC STATUTES. [CHAPTER 60, SECTION 69, AS AMENDED BY
CHAPTER 257, ACTS OF 1883.]

SECTION 69. Every person who manufactures for sale, or offers or exposes for sale as cider-vinegar, any vinegar not the legitimate product of pure apple-juice, known as apple-cider, or vinegar not made exclusively of said apple-cider, or vinegar into which foreign substances, drugs, or acids have been introduced, as may appear by proper tests, shall for each offence be punishable by fine of not less than fifty nor more than one hundred dollars.

SECT. 70. Every person who manufactures for sale, or offers for sale, any vinegar found upon proper tests to contain any preparation of lead, copper, sulphuric acid, or other ingredient injurious to health, shall for each such offence be punished by fine of not less than one hundred dollars.

SECT. 71. The mayor and aldermen of cities shall, and the selectmen of towns may, annually appoint one or more persons to be inspectors of vinegar, who shall be sworn before entering upon their duties.

[CHAPTER 307, ACTS OF 1884, AS AMENDED BY CHAPTER 150,
ACTS OF 1885.]

SECTION 1. No person shall by himself, his servant or agent, or as the servant or agent of any other person, sell, exchange,

deliver, or have in his custody or possession with intent to sell or exchange, or expose or offer for sale or exchange, any adulterated vinegar, or label, brand, or sell as cider-vinegar, or as apple-vinegar, any vinegar not the legitimate product of pure apple-juice, or not made exclusively from apple-cider.

SECT. 2. All vinegars shall be without artificial coloring matter, and shall have an acidity equivalent to the presence of not less than four and one-half per cent. by weight of absolute acetic acid, and in the case of cider-vinegar shall contain in addition not less than two per cent. by weight of cider-vinegar solids upon full evaporation over boiling water; and if any vinegar contains any artificial coloring-matter, or less than the above amount of acidity, or, in the case of cider-vinegar, if it contains less than the above amount of acidity or of cider-vinegar solids, it shall be deemed to be adulterated within the meaning of this act.

SECT. 4. Whoever violates any of the provisions of this act shall be punished by fine not exceeding one hundred dollars.

DECISIONS

OF THE

SUPREME JUDICIAL COURT.

COMMONWEALTH *v.* JULIUS S. SMITH.

SUFFOLK, SS.

DECEMBER TERM, 1888.

Complaint to the Municipal Court of the City of Boston, alleging that the defendant did sell to one Walter C. Babcock, a certain quantity, to wit: one pint of milk not of good standard quality, that is to say, milk then and there containing less than thirteen per centum of milk solids.

At the trial before Staples, *J.*, Superior Court, evidence was introduced by the government that Walter C. Babcock went to the store of the defendant and called for a quart of milk; he had a can and gave it to defendant, who took it and went to an ice-chest in the rear part of the store; defendant brought back the can with a quart of milk in it, and was paid six cents therefor. Analysis of the milk by James O. Jordan, the department chemist, showed it to contain 11.44 per cent. of milk solids, with solids not fat amounting to 9.60 per cent., and that it was skimmed milk.

Defendant testified that he bought and sold skimmed milk, and produced the measure from which he sold the milk at the store. This had the words "Skimmed Milk" marked on it in uncondensed Gothic letters not less than an inch in length, the letters being on a plate soldered to the measure and above its

centre, and being on the side of the measure to the right of the handle and extending nearly half-way round the measure. On cross-examination, he testified that he usually took the purchaser's can, went to the ice-chest, took a can of milk from it, and measured it and put it into the customer's can; if any one asked for a quart of milk, that he would not tell them it was skimmed milk; that his customers were generally regular customers, who knew the kind of milk he kept.

The defendant requested the following rulings:—

1. If the jury find and believe that the defendant sold milk of the legal skimmed milk standard out of a can or measure legally marked "skimmed milk" they cannot convict on this complaint.

This ruling was refused.

2. Selling such milk out of a can or measure so marked, with no representation save what is indicated by that marking, would be in law a sale of skimmed milk.

The court ruled that this would be so, if, through the marking, actual notice was given to the buyer of the kind of milk which he bought.

3. When milk of legal standard quality for skimmed milk is sold from a can or measure legally marked "skimmed milk," no statement need be made by the seller to the buyer that the milk is skimmed. [The marking alone is sufficient.]

This ruling was given excepting the proposition included in brackets.

4. If the jury find and believe that milk from which the cream or some portion thereof was removed was sold as pure milk, they cannot convict under this complaint.

This ruling was refused.

5. When a person comes to a store and asks for milk, and skimmed milk is sold him from a can or measure legally marked "skimmed milk," no oral statements of the character of the milk need be made.

This ruling was given.

6. The law does not require the letters "skimmed milk" on the can or measure to be the plainest it is possible to make.

This ruling was given.

7. They are sufficient if they can be distinctly seen by the persons who buy skimmed milk as and when they are buying it.

This ruling was given.

The court instructed the jury that notice of the quality of the milk must be given in some way; that the marking would be sufficient if it gave the notice; it is sufficient if the buyer was informed by it, or if it was understood by or known to the buyer that the article he buys is skimmed milk; but in some way that there must be notice or knowledge either by marks or in some other way. That the defendant would be liable unless he sold the milk, not as pure milk, but as skimmed milk, and out of a can or measure marked as the law requires. In order to his defence it must appear that the milk was sold as skimmed milk, and from a measure or can lawfully marked. Both must concur.

To the above rulings and refusals to rule as requested the defendant excepted.

The case was submitted to the jury, who returned a verdict of guilty.

Attorney-General, for the Commonwealth.

Francis G. Holcombe, for the defendant.

OPINION.

W. ALLEN, *J.* The complaint is for selling milk not of the standard quality of pure milk; that is, milk containing less than thirteen per cent. of milk solids; the defendant had a right to sell skimmed milk, which is not of the standard quality of pure milk, from cans marked in a certain manner. If he sold milk not of the standard quality of pure milk, and not sold as skimmed milk from duly marked vessels, he would be liable under this complaint; if he sold milk as skimmed milk from duly marked vessels he would not be liable.

Commonwealth v. Tobias, 141 Mass., 129.

Upon evidence tending to prove that the milk sold was skimmed milk, and that it was sold from a measure duly marked, the jury were instructed that the defendant would be liable unless he sold the milk not as pure milk, but as skimmed milk.

The jury were further instructed that the defendant would be liable unless the buyer had notice or knowledge that the milk was skimmed milk.

We think this instruction was wrong. The question whether the defendant sold the milk as skimmed milk or as pure milk was a question of fact for the jury upon all the evidence. The fact that the buyer did not know that he bought skimmed milk would not afford an inference of law that the seller sold it as pure milk. If the defendant sold the milk in the lawful and the usual manner in which he sold skimmed milk, and for the usual price of that, and if he had reason to believe that that was what the purchaser intended to call for, and expected to receive, it would be competent for the jury to find that he sold it as skimmed milk, and not as pure milk, although he may have mistaken the intention of the purchaser.

Exceptions sustained.

COMMONWEALTH v. JOSEPH L. GRAY.

SUFFOLK, SS.

APRIL TERM, 1889.

This was a complaint (under Section 1 of Chapter 317 of the Acts of 1886) to the Municipal Court of the Roxbury District of the City of Boston, charging that defendant, on the 15th of November, 1888, at said Boston, "did sell to one John H. Terry" a certain article, substance, and compound, etc., etc., "the said sale being then and there at retail, and not in the original package," and "the said Gray did not then and there attach to the package so sold, and did not then and there deliver therewith to the said Terry a label or wrapper bearing" the word "oleomargarine," "butterine," etc., according to the terms of the said act. The complaint is made a part of this bill of exceptions.

Trial at the March term of the Superior Court, before Staples, J.

Evidence was first introduced tending to show that the person making the sale complained of was one Ferguson, the agent of the defendant, in the absence of the defendant, and acting at the time within the scope of his employment in the premises.

The defendant then asked the court to rule that no evidence of the alleged sale could be introduced, because there was no

allegation in the complaint that the sale was made by an agent of the defendant, and because there was no allegation that the defendant made the sale "by his agent."

The court declined to so rule, and the defendant duly excepted.

Evidence was then introduced that Ferguson, as agent of the defendant, made the sale of the substance as complained of to said Terry in the absence of the defendant. The sale was made in a street in said Boston, from a wagon in which the defendant, by his agent, offered for sale oleomargarine, butter, cheese, and eggs.

There was evidence that in the wagon there were papers prepared and marked beforehand with the words provided for in the statute respecting the sale of oleomargarine and similar compounds, but not affixed to anything or in actual use, and also papers not so marked, testified by Ferguson to have been so kept for the sale of butter.

The defendant asked the court to instruct the jury that, if the act alleged was the result of inadvertence on the part of the agent of the defendant, the jury would not be justified in convicting the defendant.

The court refused to give this request, and ruled that such inadvertence on the part of the agent, the act complained of being done within the scope of his agency, would not excuse the principal; and the defendant duly excepted.

The jury returned a verdict of guilty, and to the above rulings and refusals to rule the defendant duly excepted.

COMPLAINT.

To the Justices of the Municipal Court of the Roxbury District of the City of Boston, holden in said Roxbury District for the transaction of criminal business within and for the County of Suffolk,

John H. Terry,

of the City of Boston, in the County of Suffolk, in behalf of the Commonwealth of Massachusetts, on oath complains that

Joseph L. Gray,

of Somerville, in our County of Middlesex, on the fifteenth day of November, in the year of our Lord one thousand eight hun-

dred and eighty-eight, at the City of Boston, and in said Roxbury District, in the County of Suffolk, with force and arms did sell to said Terry a certain article, substance, and compound made in imitation and semblance of butter, and not made exclusively and wholly of milk or cream, and containing fats not produced from milk or cream, to wit: a certain article, substance and compound known as oleomargarine; the said sale being then and there at retail, and not in the original package; and he, the said Gray, did not then and there attach to the package so sold, and did not then and there deliver therewith to the said Terry, a label and wrapper bearing in a conspicuous place upon the outside of the said package the word "oleomargarine," and no other words, in printed letters, in a straight line of plain, uncondensed Gothic type, not less than one-half inch in length, against the peace of said Commonwealth, and the form of the statute in such case made provided.

(Signed)

JOHN H. TERRY.

COMMONWEALTH OF MASSACHUSETTS.

SUFFOLK, TO WIT:

Received and sworn to, the third day of December, in the year of our Lord one thousand eight hundred and eighty-eight.

Before said Court.

GILES H. RICH,

Assistant Clerk.

A true copy.

Attest: ALFRED WILLIAMS,

Clerk.

Attorney-General, for the Commonwealth.

J. W. Converse, for the defendant.

OPINION.

DEVENS, *J.* The Statute of 1886, Chapter 317, requires that in the sale at retail of any article, substance, or compound, in imitation of butter, the seller or his agent shall attach to each package so sold, and shall deliver to the purchaser, a label or wrapper of a specified character, describing the article. It imposes a penalty upon the seller for any sale made in

violation of the provisions of the act, and the principal is made liable for the acts of his agent in making sales contrary to such provisions. But one offence is described in Section 1 which may be committed either by the seller personally or through his agent for whom he is thus made responsible. It was sufficient that the indictment charged the offence to have been committed by the defendant without alleging the manner in which he had committed it, whether by himself strictly or by an agent for whom he was responsible. The latter fact had relation only to the mode of proof of the charge, and it was correctly held that an allegation that the sale with which defendant was charged was actually made by his agent was not necessary.

The sale of the compound was, as the evidence tended to show, made by the defendant's agent within the scope of his agency, and the defendant asked the court to instruct the jury that if the act alleged (the failure to affix the label upon the package) was the result of inadvertence on his part and not intentional, the jury would not be justified in convicting the defendant, and this request was properly refused. The offence was of that class in which it was not necessary to prove any guilty intent. If the defendant engaged in the business of selling imitation butter, whether he conducted it by himself or his agent, he was bound at his peril to see that the provisions required by the law in the management of it were observed. One who sells intoxicating liquor, not knowing it to be intoxicating, or adulterated milk, not knowing it to be adulterated, is under our statutes liable therefor, although he had no guilty intent.

Commonwealth *v.* Boynton, 2 Allen, 160.

Commonwealth *v.* Farren, 9 Allen, 489.

Commonwealth *v.* Nichols, 10 Allen, 169.

Commonwealth *v.* Waite, 11 Allen, 261.

Where an act is forbidden by positive law, whether by a person or his agent, except where certain precautions are observed, neither ignorance of them nor the failure to observe them through inadvertence affords an excuse, whether this is the ignorance or inadvertence of the person himself or his agent acting within the scope of the agency with which he has been intrusted.

Exceptions overruled.

COMMONWEALTH v. CHARLES W. BEAN.

SUFFOLK, SS.

The defendant was complained of for the violation of the provisions of the law relating to the sale of oleomargarine, a copy of which complaint is hereto annexed and made a part of this bill of exceptions.

The defendant pleaded not guilty, and the government and the defendant agreed to the following statement of facts, to wit: "The defendant was a member of the firm of W. B. Mendum & Co., and on Dec. 1, 1887, had in the store of said firm a tub of oleomargarine in the original package, marked, according to the statute, upon the side and bottom, but from which the cover, which itself had been marked according to law, had been removed and the goods exposed for a time, there being no marks upon the tub except those above referred to; the cover was not merely removed at the time of sale and for the purpose of cutting out the oleomargarine, but the oleomargarine was intentionally exposed for sale for a short but substantial portion of time previous to the sale, there being then no mark upon the top of the tub as it was then exposed."

The court ruled that the above statement of facts constituted a violation of the law, and rendered the defendant guilty under said complaint, to which the defendant excepted.

The jury found the defendant guilty, and the defendant now asks that these exceptions may be allowed.

COMPLAINT.

Second Count.

And the said Babcock, on his oath aforesaid, further complains that the said Bean, on the first day of December, in the year of our Lord one thousand eight hundred and eighty-seven, at Boston, aforesaid, did expose for sale a certain article, substance and compound made in imitation and semblance of butter, and not made exclusively and wholly of milk or cream, and containing fats not produced from milk or cream; to wit, a certain article, substance, and compound known as oleomargarine; and the said oleomargarine was then and there contained in a certain tub, and he, the said Bean, did not then and there have the word "oleomargarine" stamped, la-

belled, and marked upon the top, side, and bottom of the said tub then and there containing the oleomargarine, as aforesaid, against the peace of said Commonwealth and the form of the statute in such case made and provided.

Attorney-General, for the Commonwealth.

Powers & Powers, for defendant.

OPINION.

HOLMES, *J.* A majority of the court are of the opinion that the exception must be sustained. The oleomargarine exposed for sale was in the original package; namely, a tub. The only requirement of the statute which applied to it, while there, was that the tub should be marked upon its top, side, and bottom. St. 1886, chap. 317, section 1.

The tub was so marked, and therefore the letter of the law was complied with. The statute does not say that the tub must be kept covered all the time. It would be construing a penal statute very strongly against the accused to say that the top of the tub which was to be marked was not the cover belonging to the tub, but the superficial surface, whatever it might be, which was exposed for the time being, and therefore the oleomargarine itself, when the cover was off. The top of the contents of a tub is not called the top of the tub in the common use of the language.

We may assume that to sell a tubful without the cover would be a breach of the law, because then the tub sold would not be marked on the top, as required. But, as we understand the facts, this tub had a cover duly marked, although the cover was not on the tub. The rights of the public would have been preserved if the defendant obeyed the law in making sales, as we must presume that he would have done. If he sold the whole tub at once, he would have put on the marked cover. If he sold a less amount by retail he would have attached a label.

Exceptions sustained.

DIGEST OF SOME OF THE MORE IMPORTANT OPINIONS OF THE SUPREME JUDICIAL COURT IN RELATION TO THE MILK LAW.

Pub. Stats., Chap. 57, Sec. 2, so far as it authorizes inspectors of milk to enter all carriages used in the conveyance of

milk, and, whenever they have reason to believe any milk found therein is adulterated, to take specimens thereof for the purpose of analyzing or otherwise satisfactorily testing the same, is constitutional.

Commonwealth v. Carter, 132 Mass., 12.

1. A person may be convicted of selling adulterated milk, under Pub. Stats., Chap. 57, Sect. 5 (Gen. Stats., Chap. 49, Sect. 151), although he did not know it to be adulterated; and an averment in the indictment that he had such knowledge may be rejected as surplusage.

2. It is not necessary, in such indictment, to aver that the milk was cow's milk.

3. An indictment alleging a sale of adulterated milk to a woman is not defeated by proof that she was married and was acting as agent for her husband, if the seller had no notice, expressed or implied, of these facts.

4. An indictment under Pub. Stats., Chap. 57, Sect. 5 (Gen. Stats., Chap. 49, Sect. 151), which charges that the defendant sold a certain quantity of "adulterated milk, to which a large quantity—that is to say, four quarts—of water had been added," is not bad for duplicity.

Commonwealth v. Farren, 9 Allen, 489.

1. An indictment which alleges that the defendant "did unlawfully keep, offer for sale, and sell" adulterated milk, charges but one offence.

2. In support of such indictment, one who in a great many instances has used a lactometer for the purpose of testing the quality and the purity of milk, may testify to the result of an experiment made by him with the same lactometer upon the milk in question, although no evidence is offered as to the character of the instrument.

Commonwealth v. Nichols, 10 Allen, 199.

1. At the trial of an indictment on Pub. Stats., Chap. 57, Sect. 5 (Statute of 1868, Chap. 263), for selling "adulterated milk, there was evidence that the defendant [who was a son of the owner of a milk-route], with a companion who was in

the same employment with himself, knowingly adulterated milk on its way for distribution to his father's customers, and then, having charge, with his companion, of its distribution from the wagon on which it was conveyed upon the route, caused a can of it to be delivered to one of the customers by the hand of his companion. *Held*, that he had no ground of exception to instructions to the jury; that, in the absence of proof of any previous contract to supply milk to the customer, the delivery might be deemed an act of sale; nor to an instruction framed on a supposition that the jury might find that he was in the employment of his father, although there was no averment in the indictment to that effect."

Commonwealth v. Haynes, 107 Mass., 194.

A person may be convicted of selling adulterated milk, upon a complaint under Pub. Stats., Chap. 57, Sect. 5 (Statute of 1880, Chap. 209, Sect. 3), without allegation or proof that he knew it to be adulterated.

Commonwealth v. Evans, 133 Mass., 11.

A complaint, under Pub. Stats., Chap. 57, Sect. 5, alleging that the defendant, at a time and place named, had in his possession a certain quantity, to wit, one pint of adulterated milk containing less than thirteen per cent., of milk solids, with intent then and there unlawfully to sell the same, is sufficient, without further alleging that the milk was analyzed, and found on analysis to contain less than thirteen per cent. of milk solids. At the trial of a complaint, under Pub. Stats., Chap. 57, Sect. 5, alleging that the defendant had in his possession adulterated milk, to wit, milk containing less than thirteen per cent. of milk solids, with intent to sell the same, it is immaterial in what manner the quantity of milk solids has been reduced below thirteen per cent., if the intent is to sell the milk as pure milk, and not as skimmed milk.

Commonwealth v. Bowers, 140 Mass., 483.

Pub. Stats., Chap. 57, Sect. 9 (Statute of 1880, Chap. 209, Sect. 7), providing that "in all prosecutions under this act," for selling adulterated milk, "if the milk shall be shown upon analysis to contain more than eighty-seven per centum of watery

fluid, or to contain less than thirteen per centum of milk solids, it shall be deemed for the purpose of this act to be adulterated," is constitutional.

Commonwealth v. Evans, 132 Mass., 11.

A complaint, under the Pub. Stats., Chap. 57, Sects., 5, 9, alleging that the defendant, at a time and place named, had in his custody and possession a certain quantity, to wit, one pint, of adulterated milk, to wit, milk then and there containing less than thirteen per cent. of milk solids, with intent then and there unlawfully to sell the same, is sufficient.

Commonwealth v. Keenan, 139 Mass., 193.

A complaint, under the Pub. Stats., Chap., 57, Sect. 5, alleging in one count that the defendant, at a time and place named, sold a certain quantity, to wit, one pint, of adulterated milk, to wit, milk containing less than thirteen per cent. of milk solids, and in another count, alleging that the defendant, at the same time and place, had in his possession a certain quantity, to wit, one pint, of adulterated milk, to wit, milk containing less than thirteen per cent. of milk solids, with intent then and there unlawfully to sell the same, is sufficient, without further alleging that the milk was analyzed, and found on analysis to contain less than thirteen per cent. of milk solids.

The Pub. Stats., Chap. 57, Sect. 10, do not prohibit any person not an inspector of milk from making a complaint for a violation of the provisions of the chapter.

A complaint, under the Pub. Stats., Chap. 57, Sect. 5, alleging that the defendant sold one pint of adulterated milk, to wit, milk containing less than thirteen per cent. of milk solids, is not supported by proof that he sold the milk as skimmed milk out of a tank marked as required by Sect. 7, although the milk was watered.

A complaint, under Pub. Stats., Chap. 57, Sect. 5, alleging a sale of adulterated milk, to wit, milk containing less than thirteen per cent. of milk solids, is supported by proof of a sale of milk which, by the removal of a part of the cream, has been reduced in solids below thirteen per cent., unless the

milk was sold as skimmed milk, and out of a vessel, can, or package marked as required by Sect. 7; and it is not necessary that a complaint charging such an offence should be drawn under Sect. 6.

Commonwealth v. Tobias, 141 Mass., 129.

At the trial of an indictment on Pub. Stat., Chap. 57, Sect. 5, charging the defendant with having adulterated milk in his possession, with intent unlawfully to sell the same, an analyst in the employ of the Inspector of Milk may testify to the result of his analysis of the milk taken from the defendant from memory, using a memorandum made by him at the time of analysis to refresh his memory, without further proof that the requirements of the Pub. Stats., Chap. 57, Sect. 2, as amended by the Statute of 1884, Chap. 310, Sect. 3, have been complained with.

Commonwealth v. Spear, 143 Mass., 172.

At a trial of an indictment on the Pub. Stats., Sect. 5, charging the defendant with having adulterated milk in his possession, with intent unlawfully to sell the same, an analyst in the employ of the Inspector of Milk, who analyzed the milk taken from the defendant, testified that he reserved a portion of the milk so taken, by putting it into a bottle, which he corked and sealed. A chemist, to whom the analyst delivered the portion of milk so reserved, testified, for the defendant, that the bottle was not sealed. The defendant asked the judge to rule, that, if the bottle was corked only, it was not a compliance with the requirement of the Statute of 1884, Chap. 310, Sect. 4, as to the sealing of such reserved portion. The judge declined so to rule, and instructed the jury that they might consider the evidence as bearing upon the credibility of the government witness.

Held, that the defendant had no ground of exception.

If, at the trial of an indictment on the Pub. Stats., Chap. 57, Sect. 5, charging the defendant with having adulterated milk in his possession, with intent unlawfully to sell the same, an analyst in the employ of the Inspector of Milk of a city testifies that he added, for the purpose of preserving it, a few

drops of carbolic acid to the sample reserved from milk delivered to him for analysis, it is a question of fact for the jury whether the reservation of the sample was in accordance with the requirement of the Statutes of 1884, Chapter 310, Section 4.

Commonwealth v. Spear, 143 Mass., 172.

At the trial of a complaint, under Pub. Stats., Chap. 57, Sect. 5, alleging that the defendant had in his possession adulterated milk with intent unlawfully to sell the same, the evidence showed that a wagon with the defendant's name and number on it was standing upon a public street in a city at an early hour of the morning; that the defendant's servant was on the wagon, and there were several eight-quart cans in the wagon; that a collector of samples in the employ of the Inspector of Milk for the city took a sample of milk from one of the cans, which was not marked "skimmed milk;" and that an analysis of the milk taken showed that it was below the legal standard.

Held, that there was evidence of an intent on the part of the defendant to sell the milk, which was properly submitted to the jury.

Commonwealth v. Smith, 143 Mass., 169.

A complaint on the Stat. of 1886, Chap. 318, Sect. 2, alleging that on the first day of July, 1886, the defendant had in his possession "one pint of milk not of good standard quality, that is to say, milk containing less than thirteen per cent. of milk solids, with intent then and there unlawfully to sell the same within this Commonwealth," is sufficient without negating the exception of the months of May and June.

The Stat. of 1885, Chap. 352, Sect. 6, provides that Sect. 9 of the Pub. Stats., Chap. 57 (which relates to the sale of adulterated milk), "is hereby amended so as to read as follows." The Stat. of 1886, Chap. 318, Sect. 2, provides that Sect. 9 of the Pub. Stats., Chap. 57, "is hereby amended so as to read as follows." In each section, after the words quoted, there follows a sentence which covers the whole subject of the original section.

Held, that the Stat. of 1886, Chap. 318, Sect. 2, was a valid enactment.

The Stat. of 1884, Chap. 310, Sect. 4, providing for the reservation and sealing, before commencing the analysis, of a portion of the sample of milk taken for analysis, is impliedly repealed by the Stat. of 1886, Chap. 318. Sections 1 and 3.

Commonwealth v. Kenneson, 143 Mass., 418.

An indictment on the Stat. of 1886, Chap. 318, Sect. 2, alleging that the defendant had in his "possession milk to which a certain foreign substance had been added, to wit, annotto coloring-matter," with intent unlawfully to sell the same, is sufficient without naming the quantity.

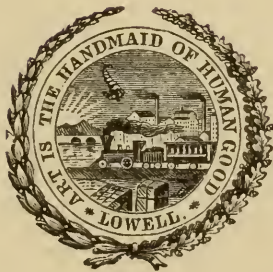
Evidence offered at the trial of such an indictment as to two samples of milk taken from the defendant's possession at substantially the same time is competent, and the government cannot be required at the same time of the offer, if ever, to elect which sample it will rely on.

The addition of the annotto coloring-matter, whether injurious to health or not, is punishable under the statute.

Evidence that the "milk was of low grade" is competent, although it may tend to prove another offence.

Commonwealth v. Schaffner, 146 Mass., 512.

ANNUAL REPORT
OF THE
SUPERINTENDENT OF STREETS,
OF THE
CITY OF LOWELL,
FOR THE YEAR 1891.



LOWELL, MASS.:
CAMPBELL & HANSCOM, PRINTERS.
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, January 30, 1892.

Received and ordered on file. Sent down for concurrence.

MICHAEL J. DOWD, *City Clerk*.

IN COMMON COUNCIL, February 2, 1892.

Received, read and ordered on file in concurrence.

DAVID CHASE, *Clerk*.

REPORT.

*To the Honorable the Mayor and the City Council of the
City of Lowell:*

In accordance with the requirements of the city ordinances, I hereby most respectfully submit the following report of the departments under my charge, viz: Roads and Bridges, Paving, and Sewers and Drains, for the year ending December 31, 1891.

ROADS AND BRIDGES.

GENERAL STATEMENT OF RECEIPTS AND EXPENDITURES.

RECEIPTS.

Appropriation	\$75,000.00
Transfers	32,275.92
Receipts from various sources	23,574.36
Total receipts	\$130,850.28

EXPENDITURES.

Total expenditures	\$130,850.28
Less receipts from various sources	23,574.36
Total net expenditures for ordinary street purposes	\$107,275.92

STREETS LAID OUT AND ACCEPTED IN 1891.

STREETS.	BETWEEN WHAT STREETS.	LENGTH IN FEET.
Babcock.....	Livingston and Chambers..... (name changed to Newhall Street)..	639.0
Bachman	Lakeview Avenue, westerly.....	691.7
Bassett.....	Whipple and Hudson.....	286.0
Berkeley Avenue..	Rogers and Berwick.....	1,020.98
Berwick	Boylston and Berkeley Avenue.....	647.34
Burgess	New School and Hastings.....	412.93
Chase	Swift, northerly.....	322.0
Exeter	Dalton and Hovey.....	358.91
Fred	Lakeview Avenue, easterly.....	466.75
Hanover Avenue...	Andover and Hovey..... (name changed to Wentworth Ave).	2,002.3
Jefferson.....	Lewis and Suffolk.....	100.0
Knapp Avenue....	Rogers and McAlvin.....	794.6
Laurel.....	Fairmount and Rogers.....	43.25
Mason.....	New School and Warwick.....	1,093.79
New Walker.....	D and A (name changed to Puffer St.)	680.0
Rea.....	Rogers and Berwick.....	931.7
Tanner.....	Howard and Lincoln.....	2,011.0
West Sixth.....	West and Lakeview Avenue.....	1,852.13
Wilder	Fr'm end of st. for'l'y laid out to Parker	1,632.04
Windsor.....	Westford and Princeton.....	383.0
Total.....		16,369.42
Number of miles of accepted streets, Jan. 1, 1891.....		105.75
Number of miles of streets accepted in 1891.....		3.10
Number of miles of accepted streets, Jan. 1, 1892.....		108.85

The name of Richardson street has been changed to Sanborn street.

Winter street has been widened at its easterly end.

The grade of Wilder street has been re-established from the Nashua and Lowell railroad to Broadway.

The grade of Middlesex street has been established from a point near Foster street to the easterly line of the premises of James T. Smith.

The grade of Westford street has been re-established from Pine street to a point opposite the premises of C. S. Dodge.

SIDEWALKS.

STREETS.	BETWEEN WHAT STREETS.	LIN. FT. CORNER STONE.	LIN. FT. EDGE- STONE.	SQ. YDS. CON- CRETE.
Ames	Northerly side, Central and Lawrence	18.1	379.0	239.4
Bellevue . . .	Westerly side, in front of the premises of Jacob Murphy		49.5	
Billings . . .	Both sides, Bridge and Aiken Avenue	46.0	2101.8	
Blossom . . .	Both sides, Gorham and West	9.2	1886.3	
Bowers . . .	Southerly side, School and easterly line of premises of John Lennon	9.0	168.6	
Bridge . . .	Westerly side, Jewett and Billings	66.6	1377.3	
Canton . . .	Westerly side, northerly line of premises of S. B. Puf- fer, and sidewalk former- ly laid			121.4
Cheever . . .	Northerly side, Tucker and Pawtucket	17.9	623.3	
Chester . . .	Both sides, Westford and Princeton	37.2	768.2	
Coburn . . .	Westerly side, West Sixth and West	26.5	630.5	476.8
Dutton . . .	Southerly side, Fletcher St. and sidew'lk formerly laid			43.9
Edson	Both sides, Westford and Princeton	37.0	768.1	

SIDEWALKS.—CONTINUED.

STREETS.	BETWEEN WHAT STREETS.	LIN. FT. CORNER STONE.	LIN. FT. EDGE- STONE.	SQ. YDS. CON- CRETE.
Fletcher...	Westerly side, West'rn Ave. and Dutton.....			18.6
Fort Hill Ave.	East'rly side, sidew'lk form- erly laid and Sherman...			309.8
Fort Hill Ave.	Westerly side, Porter and Oak.....		452.0	
Gates.....	East'rly side, sidew'lk form- erly laid and Sheldon...	9.9	389.1	
†Gorham...	Easterly side, Lowell and Andover railroad and Cosgrove.....	102.6	1486.4	
†Grand.....	Easterly side, Chelmsford and Hale.....	8.9	336.5	
Hale.....	Southerly side, Howard and Chelmsford.....	64.8	1197.6	
Harvard...	Westerly side, Princeton and northerly line of premises of Henry Run- els.....	9.2	135.1	
Hudson....	Northerly side, Central and Lawrence.....		649.8	
Jewett.....	Both sides, West Sixth and Hildreth.....	67.9	1926.6	
Lawson....	Southerly side, in front of premises of William Parr		64.0	
Lakeview Ave.	Southerly side, front of premises of Charles Cal- lahan.....			50.8

SIDEWALKS.—CONTINUED.

STREETS.	BETWEEN WHAT STREETS.	LIN. FT. CORNER STONE.	LIN. FT. EDGE- STONE.	SQ. YDS. CON- CRETE.
Lakeview Ave.	Westerly side, from Boyle estate to Bachman Street	95.2	4221.5	
Ludlam....	Northerly side, Aiken Avenue and Hildreth.	77.3	1406.6	137.7
Ludlam....	Southerly side, Aiken Avenue and Cumberland Road.....			
Marion....	Easterly side, front of premises of Cornelius Shannahan		62.2	45.8
Marion....	Westerly side, sidewalk formerly laid and Lagrange.....		233.5	143.6
Mason	Northerly side, New School and Powell.....	9.3	706.7	
Nesmith...	Westerly side, front of premises of W. S. Lamson.....			72.1
Newhall...	Both sides, Crosby and Chambers.....	36.7	630.0	401.8
New School	Easterly side, Liberty and Mason.....	9.5	263.5	
*Palmer....	Both sides, Merrimack and Middle.....			100.4
Pawtucket.	Both sides, Walker and Pawtucket canal.....	9.2	657.9	
Pine	Southerly side, Highland Avenue and Hawthorne.	18.4	223.8	71.2

SIDEWALKS.—CONTINUED.

STREETS.	BETWEEN WHAT STREETS.	LIN. FT. CORNER STONE.	LIN. FT. EDGE- STONE.	SQ. YDS. CON- CRETE.
Pleasant...	Easterly side, sidewalk formerly laid and south- erly line of premises of Ann Cooney.....		189.3	
Porter.....	Southerly side, Fort Hill Avenue and Huntington.	9.4	145.9	
Royal.....	Westerly side, Westford and Sheldon.....	20.3	836.1	355.2
Royal.....	Easterly side, Westford and Sheldon.....	18.8	889.3	552.1
Sargent...	Southerly side, in front of premises of Charles W. Deehan and E. F. Faulk- ner.....		57.3	34.3
Sherman...	Northerly side, Huntington and Nesmith.....			141.9
*So. Walker	Easterly side, Liberty and D	19.0	839.5	
So. Walker	Westerly side, Liberty and Mason.....	55.3	768.9	419.7
Sixth.....	Northerly side, sidewalk formerly laid and Beacon	9.8	258.2	
Third Ave.	Easterly side, Mammoth Road and White.....	21.2	797.2	
Varnum...	Both sides, Seventh and Tenth.....	18.9	1198.5	
Wachusett.	Easterly side, sidewalk formerly laid and Thir- teenth.....	9.5	295.1	183.6

ANNUAL REPORT OF THE
SIDEWALKS.—CONCLUDED.

STREETS.	BETWEEN WHAT STREETS.	LIN. FT. CORNER STONE.	LIN. FT. EDGE- STONE.	SQ. YDS. CON- CRETE.
Walker	Westerly side, West Adams and Middlesex	26.5	573.9	386.1
West Ninth	Southerly side, Hampshire and Bridge	26.2	430.4	225.0
‡ Western Avenue	Both sides, easterly end of freight depot and School flagging 1969.2			
Westford . .	Northerly side, front of premises of Mrs. Job Larrabee and front of premises of Wm. S. Gor- don			148.6
Westf'd and Bellevue	Southerly and westerly side, in front of premises of George A. Scribner and Fred Horne	9.8	203.6	
	Used as edgestone		31278.6 1969.2	
	Total	1031.1	33247.8	4679.8

*Unfinished.

†Completed.

‡Flagging used as edgestone.

STREETS GRADED.

STREETS.	STREETS.
A	Grand
Billings	High
Belmont Avenue	Hudson
Boylston	Lawrence
Bridge	Lakeview Avenue
Bowers	Middlesex
Barrington	Mansur
Blossom	Newhall
Babcock	Old Meadow Road
Chelmsford	Pond
Cheever	Pine
Chester	Plain
Eaton	Sherman
Edson	School
Everett	Sheep Rock Spring Road
Fairmount	South Walker
Fifth	South Wilder
Fort Hill Avenue	Third Avenue
Gates	Varnum

STREETS GRADED.—CONCLUDED.

STREETS.	STREETS.
Westford	West Ninth Street
White	Willie
Whitney Avenue	Wilder
Woodward Avenue	

MACADAMIZING.

STREETS.	BETWEEN WHAT STREETS.	SQ. YARDS.
Concord.....	Pond and Rogers.....	5140.0
Hampshire.....	West Sixth and Hildreth.....	3160.0
Suffolk.....	Broadway and Adams.....	2933.0
Total.....		11233.0

MACADAMIZED STREETS—TOP-DRESSED.

STREETS.	STREETS.
Appleton	
Broadway	
Fletcher	
Lawrence	
Rogers	
Westford	
Wilder	

COBBLE STONE GUTTER PAVING.

STREETS.	SQ. FEET.
Belmont Avenue.....	925
Broadway.....	1,560
Grand.....	1,505
Laurel.....	1,700
Lawrence.....	788
Middlesex	825
School.....	2,965
Stevens.....	952
Whitney Avenue.....	1,800
Total, 13,020 square feet or 1446 $\frac{2}{3}$ square yards.	

CONCRETE PAVING.

STREETS.	SQ. FEET.
Pawtucket..... Hard top dressing.....	965.8
Pawtucket..... Hard concrete.....	23.6
Market..... Hard concrete in front of police station.	210.5
Western Avenue. Hard concrete 5.5 feet in width on the southerly side from Fletcher Street to Coram building.....	280.4
Total.....	514.5

CONCRETE SIDEWALKS REPAIRED.

STREETS.	BETWEEN WHAT STREETS.	SQ. YARDS.
Branch.....	South side, front of premises No. 70...	16.6
Broadway	North side, near Pawtucket canal.....	41.
Central.....	East side, near Whipple Street.....	43.0
Central.....	East side, Richmond and Mill.....	85.6
Central.....	West side, near Appleton.....	60.3
First.....	North side, premises No. 50 and Simpson Street.....	12.7
Fletcher.....	West side, near Dutton.....	11.1
Ford.....	West side, near Austin.....	15.0
Fourth	South side, near Bridge.....	6.7
Gorham	East side, near Davis corner.....	30.0
Highland	At Thorndike and South Street crossings.	66.8
Jefferson	South side, near Lewis.....	23.6
Middlesex	South side, at Elliot.....	15.1
Middlesex	South side, Smith Avenue and School..	27.9
Middlesex	North side, South and Robeson.....	90.6
Salem.....	East side, Cabot and Gage.....	30.0
Second.....	North side, near Bridge.....	6.9
Smith.....	West side, near Westford.....	22.0
Smith.....	East side, near Westford.....	37.3
Third	South side, front premises No. 55.....	8.8

CONCRETE SIDEWALKS REPAIRED—CONCLUDED.

STREETS.	BETWEEN WHAT STREETS.	SQ. YARDS.
Wannalancet....	Both sides, Pawtucket and residence Dr. R. E. Bell.....	49.9
Westford.....	North side, South Canton and Wilder..	21.4
Worthen.....	West side, front Baptist church.....	77.9
	Total.....	800.2

CONCRETE SIDEWALKS TOP DRESSED.

STREETS.	BETWEEN WHAT STREETS.	SQ. YDS.
Albion	Northerly side, near West Fifth.....	9.8
Branch.....	Southerly side, front of premises No. 70.	16.6
Branch.....	Northerly side, at School Street.....	22.2
Bridge	Easterly side, at Twelfth Street.....	34.7
Bridge	Westerly side, at Shedd Street.....	11.5
Broadway	Northerly side, near Pawtucket Canal..	83.6
Broadway	Northerly side, at Marion Street.....	9.4
Broadway	South side, at Adams Street.....	19.4
Central.....	Easterly side, at Whipple Street.....	43.0
Central.....	Westerly side, front premises No. 195 to 213.....	122.8
Columbus Ave..	Southerly side, at Walker Street.....	7.3
First.....	Northerly side, premises No. 50 and Simpson Street.....	188.1
Fletcher.....	West side, front of Old Ladies Home..	18.5
Ford.....	West side, near Austin Street.....	41.9
Gorham.....	East side, near Davis Corner.....	57.2
Gorham.....	East side, premises 348 and railroad bridge	229.9
Highland	East side, Thorndike and South Street crossings.....	66.8
Jefferson	South side, near Market Street.....	43.5
Liberty.....	South side, at South Walker Street....	6.7

CONCRETE SIDEWALKS TOP DRESSED—CONCLUDED.

STREETS.	BETWEEN WHAT STREETS.	SQ. YDS.
Market.....	North side, near Central Street.....	46.1
Middlesex	South side, Smith Avenue and School..	83.7
Middlesex	South side, at Elliot Street.....	15.1
Middlesex	South side, Elliot Street and Odd Fellows block.....	132.5
Middlesex	South side, front of S. K. Dexter's premises	22.7
Pleasant.....	West side, near Pond.....	31.6
Salem.....	Easterly side, Cabot and Gage.....	179.9
School	Westerly side, near Branch Street.....	58.9
Stevens	Westerly side, near Westford Street...	11.7
Smith.....	Easterly side, near Westford Street....	60.2
Tenth.....	At Methuen.....	22.7
Third	Southerly side, front of premises No. 55	63.8
Twelfth	Northerly side, Bridge and June.....	309.7
Westford.....	Northerly side, So. Canton and Wilder.	59.5
West Sixth.....	Southerly side, opp. Water Works engine house	10.7
Winter.....	Both sides, Gorham and Davis.....	274.2
Westford.....	Northerly side, near Stevens Street....	20.0
	Total	2435.9

CONCRETE CROSSINGS.

STREETS.	LOCATION.	SQ. YDS.
Broadway	At Phillips Street.....	30.2
East Merrimack.	“ No. 148.....	38.0
Fayette	“ Bartlett Street.....	48.9
First.....	“ Simpson Street.....	26.7
John.....	“ John Street Avenue.....	15.8
Mason	“ South Loring (2).....	77.2
Mason	“ South Walker (2).....	64.0
Middlesex	“ Smith Avenue.....	26.9
Moore.....	“ Andrews Street.....	30.7
Moore.....	“ Meadowcroft Street.....	41.7
Moore.....	“ Otis Street.....	35.7
Porter.....	“ Fort Hill Avenue.....	31.7
Sargent	“ Phillips Street.....	29.0
So. Walker.....	“ Harding Street.....	31.7
So. Walker.....	“ Corner Street.....	31.0
Tenth.....	“ Methuen Street.....	39.5
Walker.....	“ Columbus Avenue.....	29.0
Walker.....	“ West Adams Street.....	28.2
West Ninth.....	“ Shedd Street.....	11.9
Westford.....	“ South Nichols Street.....	33.2
Westford.....	“ Edson Street.....	31.2
	Total.....	732.2

GRANITE CROSSINGS.

STREET.	STREET.
Across Aiken	At Lakeview Avenue.....
“ Andrews	“ Griffin.....
“ Andrews	Opposite No. 45
“ Bridge.....	At Eighteenth
“ Bridge.....	“ Tenth.....
“ Clinton Avenue.....	“ Mammoth Road.....
“ Concord.....	Opposite No. 16
“ Concord.....	At Pond
“ Eighteenth	“ Bridge.....
“ Fayette	“ East Merrimack.....
“ Foster.....	“ Westford
“ Hurd	“ Central.....
“ Jackson	“ Revere
“ Liberty	“ School
“ Lane	“ Westford
“ Market	“ Police Station
“ Marlborough.....	“ Westford
“ Marston.....	“ Middlesex
“ Middle	“ Palmer
“ Middlesex	“ Walker.....
“ Newhall.....	“ Crosby (2).....

GRANITE CROSSINGS. — CONCLUDED.

STREET.	STREET.
Across Private Way	At Cabot
“ Private Way	“ Middlesex
“ School	“ Liberty
“ Suffolk	“ Jefferson
“ Talbot	“ Belmont Avenue
“ Westford	“ Bellevue
“ Westford	“ Belmont
“ Westford	“ Gates
“ Westford	“ Marlborough
“ William	“ Central
“ West Third Avenue....	“ Mammoth Road
“ Woodward Avenue....	“ Mammoth Road

EXTENSION OF PALMER STREET.

FINANCIAL STATEMENT.

Balance on hand January 1, 1891	\$72,324.67
Expenditures	7,274.00
Balance on hand December 31, 1891	\$65,050.67

BRIDGES.

THE FOLLOWING IS A LIST OF BRIDGES IN THE ACCEPTED STREETS, AND BY WHOM MAINTAINED.

STREET.	LOCATION.	MATERIAL.	MAINTAINED BY
Chelmsford.	B. and M. R. R. Co. (Lowell system).	Iron	Boston and Maine Railroad Co.
Hale.	B. and M. R. R. Co. (Lowell system).	Wood	Boston and Maine Railroad Co.
Wilder.	B. and M. R. R. Co. (Lowell system).	Wood	Boston and Maine Railroad Co. and City.
Church.	Concord river	Stone	City.
East Merrimack.	Concord river	Wood	City.
Lawrence.	Concord river	Wood	City.
Rogers.	Concord river	Stone	City.
Market.	Merrimack canal	Wood	City.
Merrimack.	Merrimack canal	Stone and Brick.	Locks and Canals Co. and City.
Aiken.	Merrimack river	Iron	City.
Bridge.	Merrimack river	Iron	City.

BRIDGES.—CONTINUED.

STREET.	LOCATION.	MATERIAL.	MAINTAINED BY
School.....	Merrimack river.....	Iron	City.
Cabot.....	Northern canal.....	Wood	City.
Pawtucket.	Northern canal	Wood	Locks and Canals Co.
School.....	Northern canal	Brick and Stone.	Locks and Canals Co.
Suffolk.....	Northern canal.....	Wood	Locks and Canals Co.
Bridge.....	Eastern canal.....	Wood	Locks and Canals Co.
Broadway.....	Pawtucket canal.....	Wood	Locks and Canals Co.
Central.....	Pawtucket canal.....	Wood	Locks and Canals Co.
East Merrimack.	Eastern canal.....	Wood	Locks and Canals Co.
Pawtucket.	Pawtucket canal.....	Wood	Locks and Canals Co.
School.....	Pawtucket canal.....	Wood	Locks and Canals Co.
Thorndike.....	Pawtucket canal.....	Wood	Locks and Canals Co.

BRIDGES.—CONTINUED.

STREET.	LOCATION.	MATERIAL.	MAINTAINED BY
Cambridge.	River Meadow brook.....	Wood	City.
Congress.....	River Meadow brook.....	Wood	City.
Gorham	River Meadow brook.....	Stone.....	City.
Howard.....	River Meadow brook.....	Wood	City.
Lawrence	River Meadow brook.....	Stone.....	City.
Lincoln.....	River Meadow brook.....	Wood	City.
Plain (2).....	River Meadow brook.....	Wood	City.
Broadway.....	Western canal.....	Stone.....	City.
Dutton.....	Western canal.....	Wood	City.
Hall (Private St)	Western canal.....	Wood	Lawrence Manufacturing Co. and Tremont and Suffolk Mills.
Jefferson.....	Western canal.....	Iron	City.

BRIDGES.—CONCLUDED.

STREET.	LOCATION.	MATERIAL.	MAINTAINED BY
Market	Western canal.....	Wood	City.
Merrimack.	Western canal.....	Wood	Locks and Canals Co. and City.
Moody.....	Western canal.....	Wood	City.
Worthen.....	Western canal.....	Wood	City.
Lawrence.	Wanesit canal.....	Wood	Wamesit Power Co.

ANNUAL REPORT OF THE
GRANITE BLOCK PAVING.

RECEIPTS :

Loan.....	\$25,000.00	
Transfers.....	1,311,84	
		<u>\$26,311.84</u>

EXPENDITURES :

Total Expenditures.....	<u>\$26,311.84</u>
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STREETS.	BETWEEN WHAT STREETS.	SQ. YDS.
Cabot.....	Moody and Northern canal.....	1284.0
Concord.....	Andover and Pond.....	1314.5
Crosby.....	Central and Newhall.....	2622.7
Fayette.....	From East Merrimack 443 ft. southerly.	1250.6
Mammoth Road.	From paving formerly laid to northerly line of Fourth Ave.....	3688.1
Western Avenue.	From paving formerly laid to School Street.....	3126.4
	Total.....	13286.3

PERSONAL PROPERTY.

The following is a schedule of Personal Property, under my charge December 31, 1891, belonging to the Department of Roads and Bridges:

1 engine and tools (at crusher)	\$ 500.00	11 single carts	440.00
1 stone crusher	650.00	6 driving wagons	350.00
1 blacksmith shop and tools (at ledge)	150.00	1 hand cart	10.00
1 crusher building	300.00	2 stone trucks	150.00
Stock and tools in repair shop (at yard)	500.00	2 new cart bodies	40.00
Stock and tools in harness shop (at yard)	150.00	17 double sleds	765.00
1 iron road roller	75.00	2 single sleds	60 00
1 stone road roller	125.00	4 driving sleighs	200.00
1 15-ton steam road roller	4,000.00	2 new sled bodies	30.00
2 street sweepers	200.00	2 snow plows	20.00
1 sprinkling cart	200.00	7 snow scrapers	28.00
1 road builder	90.00	45 horses	8,650.00
1 committee wagon (with runners)	200.00	17 set double harness	765.00
2 lumber wagons	175.00	56 horse collars	112.00
4 wood wagons	200.00	45 halters	45.00
1 truck wagon	50.00	85 blankets	191.25
16 double carts	1,425.00	32 surcingles	9.60
		1 horse sling	4.00
		2 horse covers	4.00
		6 heavy robes	65.00

PERSONAL PROPERTY. — CONTINUED.

6 lap robes.....	15.00	35 lantern globes.....	6.00
2 carriage boots.....	3.00	4 stone drags.....	20.00
2 fly nets.....	3.00	2 plows.....	10.00
1 large platform scale,	200.00	8 wheelbarrows.....	24.00
1 small platform scale .	12.00	2 derricks.....	100.00
1 row boat.....	10.00	5 stoves.....	50.00
587 feet edgestone.....	193.71	6 office chairs.....	15.00
26 feet circle stone....	17.16	1 office desk.....	5.00
102 feet flagging.....	38.76	1 coal hod.....	.25
16 stone bounds.....	16.00	130 street signs.....	39.00
8 ton egg coal.....	47.04	1 fifty-foot extension ladder	10.00
$\frac{1}{2}$ bbl. cylinder oil.....	9.60	1 fifty-foot tape measure	1.00
$1\frac{1}{2}$ bbl. machinery Oil.	11.90	12 tool chests.....	48.00
50 bushels oats.....	23.00	70 stake chains.....	14.00
40 gals. electric oil....	3.00	100 bundles broom stuff,	6.00
10 tons hay.....	180.00	2 electric batteries.....	40.00
7 tons straw.....	140.00	4 spirit levels.....	8.00
20 feed baskets.....	10.00	3 clocks.....	7.00
2 blanket chests.....	10.00	9 street rakes.....	2.25
70 curry combs, cards and brushes.....	42.00	6 hay forks.....	3.00
3 hay cutters.....	18.00	3 manure forks.....	2.25
14 lanterns.....	10.00	33 crow bars.....	33.00

PERSONAL PROPERTY. — CONTINUED.

100 snow shovels.....	50.00	77 stone-cutting points and drills.....	23.10
107 shovels.....	27.00	28 hoes.....	8.40
6 axes.....	3.60	2 hand saws.....	1.50
1 adze.....	1.00	2 cross cut saws.....	3.00
1 scythe.....	1.50	1 hatchet.....	.50
8 heavy chains.....	16.00	14 wheelbarrows, wood (new)	21.00
1 set tackle and falls..	6.00	2000 ft. oak lumber...	70.00
4 long handled shov- els	2.00	400 ft. bridge plank...	7.20
2 steel frost wedges...	1.50	48 pick handles.....	6.00
5 trowels.....	2.50	14 stone hammers.....	28.00
9 paving mauls.....	27.00	1 stone hammer, 32 lbs.	2.00
109 picks.....	74.90	10 striking hammers...	16.00
1 feather duster.....	.75	5 hand hammers.....	3.75
1 office broom.....	.25	2 brick hammers.....	.75
1 heavy tub.....	.75	9 paving hammers.....	9.00
1 monkey wrench.....	.50	1 blacksmith hammer..	2.00
9 drilling spoons.....	2.25	30 exploders.....	1.12
198½ feet steel drills...	96.00	35 lbs. forcite.....	8.05
4 oil cans.....	1.60	1 ton blacksmith coal..	6.00
7 horse pails.....	1.75	3 meal buckets.....	1.50
9 iron pails.....	4.00	1 sand screen.....	4.00
1 ice chisel.....	.50		

PERSONAL PROPERTY. — CONCLUDED.

1 set heavy falls and rope	12.00	40 splitting wedges	1.00
8 tamping bars	5.00	1 pinch bar	1.00
37 plug drills	5.55	24 stone pickers	3.25
3 squares	2.25	5 wooden rammers	3.75
5 sets	2.50	2 sickles . . . . .	.50
3 powder cans	1.50	3 pieces rope	10.00
2 grub hoes	2.00	100 paving blocks	4.70
		Total	\$22,984.99

SEWERS AND DRAINS.

GENERAL STATEMENT OF RECEIPTS AND EXPENDITURES.

RECEIPTS.

Appropriation.....	\$20,000.00
Loan	50,000.00
Transfer from Improvement in Andover street sewer system.....	541.22
Receipts from various sources.....	7,463.98
	<hr/>
Total receipts.....	\$78,005.20

EXPENDITURES.

Total expenditures	\$77,055.49
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Balance on hand December 31, 1891.....	\$949.71

IMPROVEMENT IN ANDOVER STREET SEWER SYSTEM.

RECEIPTS.

Appropriation.....	\$3,000.00
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EXPENDITURES.

Total expenditures.....	2,458.78
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Balance, amount transferred to Sewers and Drains.....	\$541.22

PERSONAL PROPERTY.

The following is a schedule of Personal Property under my charge December 31, 1891, belonging to the Department of Sewers and Drains:

1 Hoadley engine.....	\$400.00	2 single harnesses.....	50.00
1 Webb-Watson engine,	1,000.00	41 catch basin steps...	5.00
2 steam derricks and rigging.....	300.00	1 50-ft. tape-measure ..	1.00
1 boiler.....	100.00	7 sets shear poles.....	70.00
2 submerged pumps...	300.00	6 crabs.....	75.00
2 pile drivers.....	150.00	8 sets tackle and falls..	60.00
1 pile driver frame....	25.00	9 oil cans.....	4.50
2 steam drills.....	400.00	4 hoes.....	1.00
3 blacksmith shops and tools.....	125.00	57 lanterns	14.25
5 electric batteries	200.00	128 picks	76.80
550 ft. hydrant hose...	82.50	25 drills and points....	3.75
4 sets edgestone castings.....	59.60	6 hand saws.....	4.50
4 18-inch Clapp grates..	12.80	2 cross-cut saws	2.00
5 marine pumps.....	100.00	8 hand hammers.....	8.00
1 rubber diaphragm	2.00	7 nail hammers.....	1.75
2 horses	500.00	2 brick hammers.....	.75
1 Concord wagon.....	30.00	174 shovels	72.50
2 carts.....	100.00	6 trowels.....	3.00
2 sleds	80.00	3 adze.....	3.00
		21 crowbars.....	21.00

PERSONAL PROPERTY.—CONTINUED.

10 monkey wrenches..	5.00	4 hatchets.....	1.00
3 Watergate wrenches..	3.00	5 axes.....	2.50
16 tool chests.....	80.00	31 striking hammers...	49.60
6 spirit levels.....	10.00	9 sewer jacks.....	36.00
482 feet steel drills....	242.73	13 stone hammers.....	26.00
15 drilling spoons.....	3.75	2 grub picks.....	2.00
21 tag ropes.....	10.00	4 frost hammers	8.00
15 heavy chains.....	30.00	1 spade.....	.50
10 sheeting caps.....	20.00	3 band sticks.....	1.50
8 calking irons.....	4.00	1 meal bucket.....	.50
6 drilling guns.....	3.00	1 scythe	1.50
1 timber grapple.....	1.50	3 sheathing dogs.....	3.00
7 iron pails.....	3.50	8 tampers.....	2.00
21 wood pails.....	5.25	1 mallet .....	.40
7 wheelbarrows	7.00	1 oiler.....	.25
24 wooden mauls.....	30.00	650 ft. garden hose....	32.50
3 pair stone dogs.....	6.00	1 21-in. staple grate...	7.33
3 long handle shovels..	1.50	8 man hole covers.....	18.00
4 dualin heaters.....	12.00	12 20-in. Clapp grates..	48.00
6 100-lb. iron mauls...	15.00	6 long handle dippers..	10.00
3 powder cans.....	1.50	1 keg blasting powder..	3.00
81 pick handles.....	10.00	1 blacksmith hammer..	2.00
1 bbl. cylinder oil.....	19.20	2 iron rakes.....	.60

PERSONAL PROPERTY.—CONCLUDED.

70 ft. 1½-in. steam drills	15.40	1 10-in. Y, Portland pipe	1.32
2 hydrant chucks.....	12.00	23 15x6 Y, Portland pipe	71.21
1 piece 6-in. ¼ turn, Portland pipe.....	.50	138 ft. 15-in. Portland pipe	77.63
90 ft. 18-in. Portland pipe.....	68.85	228 exploders	9.12
60 ft. 12-in. Portland pipe.....	22.95	85 lbs. forcite.....	19.55
40 ft. 6-in. Portland pipe	5.40	102 ft. marine hose....	76.50
2 ft. 10-in. Portland pipe .....	.59	15,000 ft. lumber.....	255.00
		2 strainers.....	8.00
		Total	\$5.878.83

PAWTUCKET BOULEVARD.

RECEIPTS :

Balance on hand January 1, 1891.....	\$ 72.29
Loan.....	25,000.00
Receipts.....	101.00
	<hr/>
Total receipts.....	\$25,173.29

EXPENDITURES :

Total expenditures.....	25,130.08
	<hr/>
Balance on hand December 31, 1891.....	\$43.21

PERSONAL PROPERTY.

The following is a schedule of Personal Property, under my charge December 31, 1891, belonging to the appropriation for Pawtucket Boulevard :

1 two horse scraper.....	\$25.00
1 plough.....	5.00
2 scythes.....	3.00
2 sickles.....	.50
23 iron street rakes.....	5.00
14 hoes.....	3.50
1 waterpail.....	.20
1 meal bucket.....	.50
1 lawn mower.....	7.00
1 spirit level.....	1.50
	<hr/>
Total	\$51.20

STREET CATCH BASINS BUILT DURING THE YEAR 1891.

STREETS.	LOCATION.
Appleton	North side, 5½ ft. west of west line Gorham St.
Bridge	East side, 71 ft. north of north line Merrimack St.
Belmont	West side, 11 ft. south of south line Westford St.
Belmont	East side, 21 ft. south of south line Westford St.
Chelmsford	West side, 32 ft. north of north line New Fletcher St.
City Hall Ave.	Centre, 11½ ft. west of west line City Hall Ave.
City Hall Ave.	Centre, 93 ft. west of west line City Hall Ave.
City Hall Ave.	Centre, 112 ft. east of east line Palmer St.
City Hall Ave.	Centre, 8½ ft. east of east line Palmer St.
Clark,	West side, 21½ ft. north of south line, Willie Ave.
Concord	East side, 93 ft. south of south line, Andover St.
Concord	West side, 18 ft. north of north line Rogers St.
Concord	East side, 20 ft. north of north line Rogers St.
Concord	East side, 261 ft. north of north line Rogers St.
Concord	East side, 8 ft. north of north line Sherman St.
Concord	East side, 296 ft. north of north line Sherman St.
Cross	West side, 169 ft. north of north line Willie St.
Cross	West side, 383 ft. north of north line Willie St.
Cross	East side, 383 ft. north of north line Willie St.
Dummer	East side, 15 ft. south of south line Little St.
Dummer	West side, 6 ft. north of south line Little St.

STREET CATCH BASINS BUILT.—CONTINUED.

STREETS.	LOCATION.
Dutton.....	North side, 12½ ft. east of east line Kitson St.
Dutton.....	North side, 157 ft. east of east line Kitson St.
Dutton.....	South side, 267 ft. east of east line Kitson St.
Dutton.....	North side, 324 ft. east of east line Kitson St.
Gorham	East side, 71 ft. south of south line New Apple- ton St.
High	East side, 15½ ft. north of south line Pond St.
Lakeview Ave.....	West side, 86½ ft. south of south line Aiken St.
Lakeview Ave.....	North side, 98 ft. west of west line Beaver St.
Lakeview Ave.....	North side, 91 ft. west of west line Campaw St.
Marlborough	West side, 544 ft. south of south line West- ford St.
Marlborough	East side, 557 ft. south of south line West- ford St.
Mammoth Road....	East side, 220 ft. north of north line 8th Ave.
Mammoth Road....	West side, 225 ft. north of north line 8th Ave.
Mammoth Road....	East side, 11 ft. north of north line 7th Ave.
Marion	South side, 7½ ft. west of west line Broadway.
Middlesex	South side, 9 ft. west of west line Webster St.
Nesmith	West side, 24 ft. north of division line between John Stott and Thomas Costello.
Pond	North side, 5½ ft. east of east line Concord St.
South Walker.....	West side, 20 ft. north of north line Mason St.

STREET CATCH BASINS BUILT.—CONCLUDED.

STREETS.	LOCATION.
South Walker.....	East side, 22 ft. north of north line Mason St.
Sherman.....	North side, 6 ft. east of east line Concord St.
Western Ave.....	West side, 136 ft. south of north line Freight House.
Western Ave.....	East side, 134½ ft. south of north line Freight House.
Western Ave.....	East side, 212 ft. north of south line Freight House.
Western Ave.....	West side, 213 ft. North of south line Freight House.
Westford.....	South side, 7 ft. west of west line Belmont St.

TABLE SHOWING THE SEWERS BUILT DURING THE YEAR 1891. LENGTH, SIZE, MATERIAL, WHEN BEGUN AND FINISHED, AND COST.

STREETS.	SIZE AND LENGTH.				MATERIAL.	Average Depth.	Cubic Yards Ledge.	Man Holes.	BEGUN.	FINISHED.	COST.	Total Length.
	18 inch	15 inch	12 inch	10 inch								
* Andover St. Extension, 130 ft. 30 in., (finished), (contract).....					Brick and Iron.	14.5	5.3	2	Nov. 11, 1890.	July 11, 1891.	\$2,228.61	315
Auburn.....					Akron Pipe.	8.3		2	July 28, 1891.	Aug. 4, "	381.53	302
Adams.....					Akron Pipe.	11.5	22.7	1	Sept. 14, "	Sept. 29, "	707.44	291
Broadway.....					Akron Pipe.	10.4	56	1	Sept. 24, "	Oct. 13, "	524.86	183.5
Bowers.....					Akron Pipe.	7.1		2	Sept. 10, "	Sept. 14, "	227.79	147
Beaver, 12 ft. 30 in. Iron, 551.5 ft. 37 x 25 in. Brick.					Brick and Iron.	10.2		4	Oct. 5, "	Oct. 28, "	1,284.54	563.5
Bridge St. Outlet, 57 ft. 40 in. Iron, (finished).....					Brick and Iron.	5.0		1	Oct. 10, "	Aug. 27, "	532.45	57
City Hall Avenue. Relaid.....					Portland Pipe.	13.9	104.2	2	May 11, "	July 11, "	2,052.50	455
Corner.					Akron Pipe.	6.8	6.3	1	July 8, "	July 11, "	151.40	164.5
Common					Akron Pipe.	7.7	12	5	Aug. 4, "	Sept. 3, "	1,353.03	851
† Exeter.....					Portland Pipe.			1	April .., 1890.	April .., 1890.	363.70	225
Foster.....					Akron Pipe.	8.7		1	July 11, 1891.	July 21, 1891.	380.28	345
Fayette. Relaid, (finished), (contract).....					Akron Pipe.	12.8	27.5	1	Oct. 23, 1890.	Feb. 7, "	388.44	602.5
Hanover. Relaid.....					Akron Pipe.	11.5			June 12, 1891.	June 16, "	144.23	86.5
Hanover. Relaid.....					Akron Pipe.	10		1	Nov. 25, "	Dec. 5, "	336.19	179.
June, (finished), (contract).....					Globe Pipe.	9.5	2	2	Dec. 10, 1890.	April 26, "	379.21	363.5
Kinsman. Relaid.....					Portland Pipe.	10.3		2.5	July 10, 1891.	Aug. 3, "	942.09	666.5
Lawrence. Relaid, 442 ft. 22 x 33 in., Brick.....					Brick.	16.4	494	2	June 29, "	Oct. 23, "	6,623.84	442
Lawrence.....					Portland Pipe.	12.8	1267	3	Aug. 31, "	Unfinished ...	8,574.37	1,012.5
Lawrence Court.....					Akron Pipe.	7.7		2	Oct. 16, "	Oct. 21, "	239.72	198.5
Lakeview Avenue.....					Akron Pipe.	10.8		8	Oct. 23, "	Nov. 25, "	2,544.22	1,868.5
Lakeview Avenue.....					Akron Pipe.	11.7		1	Nov. 27, "	Dec. 2, "	558.31	305
Linden.....					Akron Pipe.	7.3	51.3	...	Nov. 14, "	Nov. 23, "	235.64	108
Merrimack, (contract).....					Akron Pipe.	15.6	7.8	3	April 6, "	June 6, "	1,364.35	408.5
Manchester.....					Akron Pipe.	11.9		3	April 21, "	May 1, "	650.97	495
Manmoth Road.....					Akron Pipe.	11.7	348.2	7	April 20, "	June 29, "	3,819.48	1,485
May.....					Akron Pipe.	9.5	8	2	May 18, "	June 13, "	819.00	421

TABLE SHOWING THE SEWERS BUILT DURING THE YEAR 1891. LENGTH, SIZE, MATERIAL,
WHEN BEGUN AND FINISHED, AND COST.—CONTINUED.

STREETS.	SIZE AND LENGTH.				MATERIAL.	Average Depth.	Cubic Yards Ledge.	Man Holes.	BEGUN.	FINISHED.	COST.	Total Length.
	18 inch	15 inch	12 inch	10 inch								
Mt. Washington	156	.....	Portland Pipe.	8.4	.....	1	June 9, 1891.	June 12, 1891.	\$191.53	156
Mead	269.5	.....	Portland Pipe.	11.2	.....	3	June 15, " "	June 30, " "	553.50	269.5
New South Walker	837	.....	Akron Pipe.	9.2	114.2	4	June 30, " "	Aug. 6, " "	1,454.69	837
New A.	213	.....	Akron Pipe.	7.8	.....	1	Oct. 12, " "	Oct. 15, " "	234.24	213
Phillips	322	.....	Akron Pipe.	7.9	145	2	June 17, " "	July 8, " "	687.61	322
Pine	376.5	.....	Akron Pipe.	7.7	239	2	Aug. 6, " "	Sept. 21, " "	1,638.71	376.5
Rogers, 81 ft. 20 x 30 in., Brick	784	.....	.....	Brick.	13.5	5.6	3	Oct. 22, " "	Dec. 31, " "	2,741.93	865
South Walker	277	.....	Portland Pipe.	10.8	13.3	1	April 30, " "	May 11, " "	399.09	277
Tanner, 1,540 ft. 45 x 30 in., Brick	Akron Pipe.	15.2	.....	7	Aug. 4, " "	Dec. 11, " "	14,987.35	1,540
Tanner, 360 ft. 45 x 30 in., Brick	Brick.	14	.....	1	Dec. 11, " "	Jan. 6, 1892.	3,336.26	360
Ware	509.5	.....	Brick.	9.5	297	2	May 1, " "	June 9, 1891.	1,401.67	509.5
Westford	213	.....	Portland Pipe.	9.4	21.5	1	July 20, " "	July 28, " "	378.08	213
West Ninth	415.5	.....	Akron Pipe.	8.4	.....	3	Nov. 4, " "	Nov. 14, " "	450.26	415.5

Lineal feet of Sewers laid in 1891.....	18,178.5 or 3.44 miles.
Laid previously.....	55.78
	<hr/>
Deduct for relays in 1890-'91.....	59.22 miles.
	.42
	<hr/>
Length of Sewers January 1, 1892.....	58.80 miles.

NOTE.—Any of the above-named sewers which appear in the Superintendent's report for 1890, the lengths and costs therein specified, added to the lengths and costs of the same in 1891, will give the total lengths and costs, as given below:—

Andover Street Extension.....	Total length, 315 feet.....	Total cost, \$3,644.39
Bridge Street Outlet.....	" " 57 "	" " 938.25
Fayette.....	" " 602.5 "	" " 1,094.56
June.	" " 363.5 "	" " 431.75

* An extra of 108.75 cubic yards, Rubble and Concrete Masonry.

† Built by Thomas Nesmith, and accepted by the city, at a cost of \$363.70.

REMARKS.

In submitting my third annual report there are certain recommendations which I desire to make. I realize that the suggestions and recommendations of superintendents in their annual reports are seldom the subject of serious consideration, still I am convinced of the fact that for carrying on the larger part of the street work there should be adopted a new system, the results of which could be obtained only by increased appropriations.

In the first place the city should be divided into sections and to each section a foreman and a suitable number of men and teams should be assigned, to thoroughly clean and keep it in repair. If the sections are not so large as to prevent the possibility of keeping them in good condition, there will immediately spring up a rivalry between the different foremen to keep their sections a credit to themselves and to the city.

Secondly, the macadamized streets need more thorough attention. After a street is once macadamized the expense of keeping it in repair is comparatively small, if it is looked after constantly and closely. To be sure, the material at our disposal for macadamizing purposes is not what it should be, because it is constantly grinding up into fine dust, which, in wet weather, becomes thick, sticky mud; but if the surfaces of the macadamized streets are kept thoroughly scraped, the most desirable streets obtainable for all our suburban thoroughfares are the results.

Much of the stone paving should be relaid, especially on Market, Central, and Middlesex Streets, where it has become badly worn, having been laid many years and sub-

jected to the many different "diggings up" for various purposes. In the localities mentioned the paving has an uneven surface and presents an unsightly appearance. I would suggest that the paving in the above named streets could be relaid in other streets needing paving where there is not so much heavy travel, and in its place should be substituted large granite paving blocks, laid on concrete base, with joints filled with road pitch and covered with clean coarse sand or pebbles.

Many brick sidewalks ought to be relaid. While they are not really dangerous, still they present uneven surfaces. Special attention should be paid to this branch of work by the department the coming year.

BRIDGES.

A new iron bridge has been built across the Western Canal at Jefferson Street. Many of the other bridges have been replanked, and all are to-day in good condition with the exception of the cemetery bridge on Lawrence Street, the East Merrimack Street and Cabot Street bridges, which are old, and will have to be rebuilt in the near future.

SIDEWALKS.

The contract for furnishing edgestones was awarded to Brown Brothers & Carlin of North Chelmsford, who have been very prompt in forwarding the stone, and have furnished many more than were originally called for by the committee.

PRECAUTIONS AGAINST FIRE.

Once more I desire to call your attention to the unguarded condition of the city stables against fire, and to urge upon you the great necessity for better fire service.

PAVING DEPARTMENT.

In no way does the city spend money more economically than by doing each year at least twenty-five thousand dollars' worth of paving. I would recommend that the policy adopted for the past three years be continued.

REVISION OF CITY ORDINANCES.

In the revision of the city ordinances the powers of the Superintendent of Streets in certain directions should, in my opinion, be enlarged. I do not think any one should be allowed to open or tear up a public street without having first obtained permission from the superintendent. The matter of obstructing streets for any purpose whatever should also be under his control. Divided responsibility in the matters mentioned above results in an undesirable state of affairs. In relation to the obstruction and digging up of streets, I would respectfully call your attention to certain ordinances of the city of Boston, which, in my opinion, are most excellent.

PAWTUCKET BOULEVARD.

The grading of the roadways is practically finished. With a much less amount of money than has been expended during the last two years, great progress can be made each year in beautifying this resort, which is fast becoming popular.

SEWERS AND DRAINS.

The sewer department the past year has been conducted on business principles, and, so long as it is carried on in that manner, the results will receive the approval of the taxpayers and citizens. Much of the work that has been ordered during the past three years has been vigorously

prosecuted to completion. As streets are graded and edge-stones set, it becomes necessary to build many catch basins. Great care should be exercised in locating them, as it is of great importance that no more should be built than are actually needed. Many of the sewers are of insufficient size to carry off the excessive amount of storm water they might receive as a result of too many catch basins.

IN CONCLUSION.

I desire to return my sincere thanks to His Honor the Mayor and members of the City Council for their assistance and approval; especially to the city engineer, his assistants, and the committees on streets and sewers for their ready assistance and advice. The relations with the heads of the different departments have also been most pleasant. Much praise is also due my assistants, foremen, and other employees of the departments for their co-operation in the city's welfare.

Most respectfully submitted,

HORACE P. BEALS,

Superintendent of Streets.

ANNUAL REPORT
OF THE
CHIEF ENGINEER OF FIRE DEPARTMENT
OF THE
CITY OF LOWELL,
FOR THE YEAR 1891.



LOWELL:
DAILY NEWS JOB PRINT, HILDRETH BUILDING
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN. Jan. 19, 1892

Received and ordered on file. Sent down for concurrence.

MICHAEL J. DOWD, City Clerk.

IN COMMON COUNCIL, Jan. 19, 1892

Received and ordered on file, in concurrence.

DAVID CHASE, Clerk.

REPORT.

CHIEF'S OFFICE, PALMER ST. ENGINE HOUSE, }
LOWELL, January 1st, 1892 }

To the City Council of the City of Lowell:

GENTLEMEN:—In accordance with the requirements of the ordinances governing the Fire Department, it becomes my duty, as Chief Engineer, to present to you the annual report of the Fire Department of Lowell for the year ending December 31, 1891.

The report will be found to contain statements in detail embracing the amount of expenditures, a register of the department, with age, residence and occupation of each member, a record of all fires and alarms which have occurred during the year and the cause thereof, with the names of the owners or occupants, the loss and insurance, as nearly as could be ascertained, with the number and location of the fire-alarm boxes; also an inventory of all property of the department, in charge of the several companies, and such other information as is thought proper for your consideration.

The following statement will show the receipts and expenditures :

RECEIPTS.

Balance undrawn, January 1, 1891.....	\$ 126 85	
Appropriation	80,000 00	
Loan.....	10,000 00	
Transfers.....	15,058 03	
Received from other sources.....	1,311 85	
	<hr/>	\$106,496 73

EXPENDITURES.

Pay Roll.....	\$73,643 52	
Water Works, for hydrants, etc.....	10,590 50	
New Fuel Wagon.....	300 00	
New Electric Motor.....	257 50	
New Bells, Wire and rental of Telephone	408 79	
New Lathe.....	235 00	
Express and Freight.....	75 83	
New Horses, exchange and use of horses	1,508 50	
New Hose Pipes and Repairs.....	1,674 66	
Laundry.....	119 56	
Hay, Grain and Straw.....	5,111 58	
Horse Shoeing.....	972 77	
Veterinary and Medicine.....	412 80	
New Harnesses, Whips and Repairs....	537 84	
Beds and Furniture.....	455 89	
Coal and Wood.....	1,848 60	
Alterations and Repairs of Apparatus..	2,694 33	
Alterations and Repairs on Houses.....	624 26	
Oil, Sponges, Brooms, Soap, etc.....	1,194 19	
Gas.....	842 82	
Cloth, Buttons and Badges.....	516 11	
Fire Alarm Expenses.....	1,871 37	
25 Rubber Covers.....	295 00	
Incidentals.....	305 31	
	<hr/>	\$106,496 73
Loan to furnish New Engine Houses...	\$17,000 00	
Expended.....	2,786 00	
	<hr/>	
Balance undrawn, December 31, 1891...	\$14,214 00	

SALARIES OF MEMBERS OF FIRE DEPARTMENT.

Chief Engineer.....	\$1,500 00 a year
First Assistant Engineer.....	300 00 a year
Other Assistant Engineers.....	275 00 a year
Secretary of the Board.....	25 00 a year
Foreman of Companies (call).....	225 00 a year
Call Men.....	200 00 a year
Permanent Men.....	2 75 a day

FORCE.

The Department is divided into two classes—Permanent and Call. The Permanent force consists of

1 Chief Engineer,	19 Drivers,
1 Fire Alarm Operator,	11 Laddermen,
18 Hosemen,	4 Engineers of Steamers.
4 Patrolmen,	

A total of 58, of which 10 are Foremen and 8 Assistant Foremen.

The Call force consists of

4 Assistant Engineers,	54 Hosemen.
20 Laddermen,	

A total of 78, of which 3 are Foremen and 5 are Assistant Foremen.

This makes a total of 136 men, divided into companies as follows:

4 Steam Fire Engine Companies, with Hose Reels,
5 Horse Hose Companies,
3 Hook and Ladder Companies, with 2 Chemicals attached,
1 Patrol Company.

The changes in the force during the year have been as follows:

Deaths.....	3
Appointed on call force.....	7
Transferred from call to permanent	8
Discharged.....	4
Transferred.....	2

The permanent force is composed mostly of mechanics, and there has been an increase of six to the force the past year, and as I said in my last report, the improved facilities for extinguishing fires necessitates the arrival of the men with the apparatus, I think it is for the interest of the city to make a small increase each year to the permanent force.

The apparatus is kept in the best possible condition, and consists at present of four Engines, four two horse Reels, five one horse Hose Wagons, one Babcock Aerial and two trucks of other patterns, two Chemical Engines, thirteen Fire Extinguishers, one Patrol Wagon and Sleigh fully equipped, nine Hose Pungs on runners, seven Fuel Wagons, three Wagons and one Sleigh for use on Fire Alarm, one Wagon and Sleigh for Chief's use. In reserve there are one engine, one two horse and one one-horse reel; also there is one hand Hose Carriage stationed at the City Farm. The only addition has been the purchase of a new Fuel Wagon.

FIRE-ALARM.

This branch of the service has been maintained in most excellent condition by the operator, Mr. George B. Whitney, and has given perfect alarms the past year.

There have been one hundred and thirty-eight first, and two second alarms given from signal boxes; also the No-School Signal has been given six times the past

year. Five new boxes have been placed in circuit the past year numbered and located as follows :

- 85—Pine, corner Marlborough street.
- 135—Perry street, Electric Light Station.
- 183—Mason, corner South Loring street.
- 185—Westford, corner Pine street.
- 214—Nesmith, near Rogers street.

Box 132, to be located near the Pumping station, has been ordered, but is not in circuit yet.

Connected with the circuit there is one ten-circuit non-interfering repeater, one ten-circuit cut out and testing switchboard, eleven galvanometers, nine bell strikers, twelve large gongs for Engine Houses, thirteen small gongs, thirteen indicators, one line tester, thirteen electro-magnets and connections for opening stall doors, twenty electric light current protectors, eighty-three public and two private signal boxes, eighty-two miles of wire, the whole supplied by a gravity battery of three hundred and eighty-three cups. There is also one large gong and indicator combined, in the Police Station and one large gong in the Pumping Station.

TELEPHONE.

There are connected with this system fifteen stations, consisting of a transmitter, telephone, bell and battery; there are also sixteen extension bells for the sleeping rooms of the Engine Houses, and about thirty miles of wire owned by the City and under the care of

the Fire Alarm operator, except the transmitters and telephones, which are leased from the Telephone Company.

HORSES AND HARNESSSES.

There are forty-four horses in the service of the Department, seven having been added during the past year as follows: One on Chemical C, one to replace the horse which had to be killed by reason of a broken leg caused by his running away, and one each on the two Trucks and three Engines, to be used as extra horses in bad weather, the Committee thinking it better to buy than to hire, as the extra horses will be used on the new apparatus in the Spring. The horses now are in good condition, but the service required of them, by the enforced idleness that they are compelled to endure and when called upon to respond to alarms, is calculated to soon break them down and render them unfit for use in this department. There are eleven pairs of double, two sets of three-horse hitch, and eight single swinging harnesses of the Berry patent. There are also five harnesses to make up three-horse hitches for the other Engines and Trucks.

HYDRANTS.

During the year sixteen new post and two Lowry hydrants have been added, making a total of eight hun-

dred and sixty-two, for which this department is charged annually twelve dollars each.

The posts added are located as follows: Cosgrove, Dalton, Fred, Hanks, London, Main, Midland, Perrin, Powell, Quebec, School, Sherman, Stanley, Westford, and West Ninth streets and Western Avenue one each. The Lowry hydrants are located on Dutton street at the corner of Market street and opposite the Lowell Machine Shop.

PROTECTIVE DEPARTMENT.

This department is maintained by the City, and consists of five permanent men. This company have again demonstrated their usefulness in saving property from damage at fires, and have been of great assistance in subduing small fires with their fire extinguishers, during the past year. They have spread three hundred and thirty-eight covers, and have used one hundred and seventy-three extinguishers the past year.

Chemical Engine C, attached to Truck 2, used twelve tanks. Chemical Engine B, attached to Truck 3, used fifty-two tanks.

HOUSES.

Two Engine Houses are now being erected, one on Lawrence street for a Hose Wagon and Truck, and one on Mammoth road, Pawtucketville, for a Steamer

and Combination Hose Wagon. The houses of the department are in very good repair, and having been improved from year to year, they are provided with every requisite for the comfort and convenience of the men and the ample accommodation of horses and apparatus. The inside of the Palmer Street Engine House needs painting, as the walls were left unfinished until the building should settle.

FIRES AND LOSSES.

The whole number of alarms of fires that occurred during the year ending December 31, 1891, two hundred and sixteen first, and two second or general alarms. One hundred and thirty-eight were given from signal boxes, twenty-seven by telephone, forty-four still alarms and seven automatic, to every one of which some part of the department has responded.

There has been an increase of forty-six alarms over last year. The whole amount of loss as near as could be ascertained was \$176,736.13; the amount of insurance was \$1,008,005.00; the amount of insurance paid was \$163,826.13, making the net amount of loss above insurance \$12,910.00. This is the largest number of alarms of any year that I have been connected with the department. There have also been a number of small fires extinguished by members of the Police

Force and other citizens, where the department was not called.

Fires have occurred during the year which were the deliberate acts of the incendiary. Somebody has a spite against the lumber yards, as we have had fires set in five of them with losses amounting to \$43,624.00: also in two different yards lighted candles have been found under a pile of boards before they took fire, without doing any damage. A candle was left burning under an old ice house near one of these yards, but the wood being wet the candle was consumed without doing any damage. A man, giving his name as Donaldson, was seen to stop deliberately and set fire to some hay in the stable of Manning & Leighton. He was chased and caught, and was simply sent by the Judge to the Reformatory, which I think hardly puts a check on this class of persons, as they are soon let out. They should be given the full penalty of the law when they are caught, as it is almost impossible to catch one. This man is wanted, I understand, in Worcester for the same crime.

Twelve alarms have been put under the head of incendiary, three of which were out of the City, but for want of evidence only one case was investigated before Judge Hadley. The evidence was sent to the District Attorney, but has never been heard from. There has been only four false alarms from boxes the past year. One of them was pulled by two small boys.

They were put on probation. We have had four alarms by thermostats being overheated, from causes unknown. The department has been called eight times for fires out of the City, as follows: February 15, a house in Dracut owned by Joe Swan. Cause: defective chimney. Loss and insurance \$975.00. February 22, School and Town House in North Billerica. Cause: unknown. Loss and insurance \$8,000.00. April 2, call for a Chemical Engine from Chelmsford. One was sent, but the fire being in Carlisle it was stopped and sent home. April 29, a house owned by the Merrimack Woolen Mills in Dracut. Cause: unknown. Loss and insurance \$864. September 8, house and barn owned by W. P. Foye in Dracut. Cause: supposed incendiary. Loss \$5,000.00; insurance \$3,380.00. October 2, store room owned by the Atherton Machine Company in Tewksbury. Cause: unknown. Loss and insurance \$500.00. December 13, a house in Dracut, unoccupied. Cause: supposed incendiary. December 17, a large barn owned by Mrs. H. R. Barker in Dracut and occupied by W. L. Fuller who lost two horses, thirty-four cows, forty tons of hay and all his farming tools. Cause: incendiary. Loss, not settled.

There have been only two notable fires the past year, the most serious was the destruction of the Edson Block on Merrimack street, and was the most obstinate fire the department has had to contend with

for several years, and as a consequence the department and its management received a great deal of censure from a so called sidewalk committee, which would be impossible for them to suggest a single idea that could be utilized. The construction of this block consisted of a brick wall fronting on Merrimack street, and a similar wall forming the rear of the building, along the back alley. There was employed in place of the usual side walls to a building, common 3-4 studding set one and a half feet apart, against the Polard Building on one side and the Masonic Building on the other, framed in such a manner as to support the floor joists and to receive the laths and plastering of the several stories which consisted of four and basement. The fire started in the basement, about the centre, from some unknown cause, supposed to be combustion, and was first seen coming out of the rear window, setting fire to a box of waste paper, which caused a report that children set it on fire. This basement was occupied by H. C. Church & Son, where racks extending from the store to the basement floors were used to store large quantities of picture mouldings, cotton waste, cotton batting and other materials used in their business, forming a large mass of inflammable matter, the basement being subdivided by board partitions into different compartments thereby stopping the streams of water reaching the fire. When the department arrived

the heat and smoke was so dense, it was impossible for any man to enter more than two or three feet, to reach the worst fire which was furnished the best of flues between the floor joists to the Pollard and Masonic Buildings, gaining a draft between the stud-dings to the roof, the flame coming through the light shaft. Not knowing how long the fire had been burning it was considered dangerous and unsafe for the men to enter the building, as it was liable to collapse, which it did in a very short time. The lives of the men being worth more than the building, orders were given to keep out. The simple 3-4 stud-ding which formed the only support on either side, were in a short time sufficiently weakened by burning, to cause the roof and flooring to collapse, leaving the end walls standing. Very little of the block, except in the basement, was burned until it fell. This block was no loss to the City, but was insured for \$15,000.00, which was paid. It was lucky for the tenants in the building that the fire started in the day time, for if it had been in the night not one of them would have got out alive, the heat and smoke going through the block so quick. As it was they had to leave everything and run, one lady not having time to dress herself. The loss to these tenants, and the occupants of the two stores who had no time to remove anything, was \$23,285.00; insurance, \$20,085 00. The next morning a friend of one of the ladies found a

silk dress with a pocket book containing a hundred dollars, hanging on the nail where she left it. The fire was communicated to the Masonic Building through what was supposed to be a fire-proof door, but which proved to be only a sham, a hole knocked through the brick wall, door jambs the width of the wall, leaving a hole between the jamb and wall which should have been bricked up. The heat and smoke going up between the studding to this hole passed through under the stairs leading to the Masonic Hall, where five gas meters set, two of which were one and one-half inch. The connections being melted you can imagine the rest. When the outside door was opened the entry and stairs were all of a blaze. The fire had got a foot hold under the floor leading to the Library and the partition to the Hall. Attention was immediately given to this building. The occupants of this building lost \$39,745.00 on account of damage by water. The insurance on the same was \$73,350.00. The Pollard Building suffered a loss by smoke and water in basement of \$8,433.00. Simpson & Rowland, in the Wyman Building, on the opposite side of the avenue, suffered a loss of \$2,495.00 by water in cellar. J. E. Shanley, in the building below the Masonic Building, suffered a slight loss by smoke. This fire occurred on Sunday, April 5. The first alarm was rung in at 12.43 P. M. A telephone was sent in for additional help at 1.15 P. M. At 1.56

two rounds on the same box (56) were rung in, a general call immediately following.

The other one occurred November 2. Alarm came in at 10.10 P. M. General alarm rung in at 10.15 p. m. Lumber yard owned by Burnham & Davis, Western Avenue. Investigation showed that it was set in three different places, and had a good start before the department arrived. A fight was made to save the five-story mill belonging to J. A. Coram on one side, which was successful, with a very small loss. The loss on the lumber yard was \$38,090.00; insurance \$30,750.00; paid \$30,090.00. A strong wind blew sparks across the canal, setting fire to the saw mill of Davis & Sargent, also the roofs of five houses, which kept the department busy for a short time. The prompt action in giving alarms and activity with which the members of the department have responded, has stopped a number of threatening fires. The following are a few of them: January 13, Hamilton Print Works; January 23, Arey, Maddocks & Locke, Tannery; March 21, W. P. Foye's grain store; April 21, Scannell & Wholley, Foundry; May 23, Howe Bros.' Block, Middlesex street; May 24, Daniel's Block; June 10, Appleton Corporation; July 3, Wellman Block; July 25, Davis & Sargent, lumber yard; July 29, Fay Bros. & Hosford, Opera House; August 14, R. Dobbins' Boiler Shop; August 22, Davis & Sargent, lumber yard; September 11, Davis

& Sargent, lumber yard; October 16, Mrs. L. H. Wilson, lumber shed and mill; November 21st, Wamesit Steam Mill Co.; December 25, Daniels Block.

The following will show the principal causes of the different alarms, as near as could be ascertained;

Steam escaping.....	2	Reading in bed.....	1
Curtain and gas jet.....	6	Careless use of matches.....	14
Stove smoking.....	3	Gas stove set floor.....	1
Sparks set roof.....	9	Cigar stubs.....	3
Overheated furnace set roof	1	Overheated stove set parti'n	1
Overheated boiler set roof ..	1	Ventilator over stove set roof	1
Pipe in coat pocket.....	1	Overheated thermostat	6
Gas leak and match.....	1	Matches in pocket.....	1
False alarms.....	4	Naptha from gas jet.....	2
No school.....	6	Chimneys.....	16
Smoke from stove pipe.....	1	Kerosene oil explosion.....	10
Incendiary	12	Shavings caught from stove	3
Old rubbish.....	1	Stove pipe set roof.....	1
Tramps in stable.....	3	Hot bearings.....	1
Burning caterpillars' nests...	1	Unknown.....	17
Electric light wires.....	4	Grease on stove.....	1
Clothes drying near stove...	3	Smoking in bed.....	1
Combustion	15	Fire works.....	2
Defective chimney.....	14	Gas jet and rubbish.....	1
Defective fireplace.....	1	Locomotive sparks.....	1
Hot ashes in barrel.....	1	Waste paper in fireplace....	1
Children and matches.....	11	Kettle of brimstone.....	1
Exposure.....	6	Caught in picker.....	1
Brush	9	Naptha torch exploded.....	1
Grass	4	Rekindled.....	5
Smoking in stables.....	3	Gasoline tank.....	1
Rats and matches.	4		

Of the buildings in which these fires occurred one hundred and forty-seven were composed of wood and thirty-eight of brick or stone.

The following signal boxes were used in giving the alarms:

Box.	Alarms.	Box.	Alarms.	Box.	Alarms.	Box.	Alarms.
3	2	25	4	41	1	72	2
4	2	26	1	48	2	84	1
5	4	27	2	51	2	115	2
7	8	28	4	52	1	121	1
9	4	29	2	53	9	125	6
13	6	31	1	54	5	129	1
14	3	32	1	56	4	131	3
15	1	33	1	61	3	134	1
16	2	34	2	62	1	138	2
18	1	35	2	63	1	163	3
19	3	37	4	64	2	172	2
21	2	39	3	65	1	181	2
23	4	42	1	67	4	241	1
24	2	45	1	71	2		
Total		-	-	-	-	-	138

Alarms, from signal boxes.....	138
Still alarms.....	44
Telephone alarms.....	27
Automatic alarms.....	7
General alarms.....	2

Whole number of alarms to December 31, 1891..... 218

The following table shows the number of alarms of fire for each month :

Jan .. 18	March 14	May.. 18	July.. 19	Sep... 15	Nov.. 27
Feb .. 7	April. 31	June.. 10	Aug.. 15	Oct... 14	Dec... 30

The following deaths by burning have occurred the past year :

April 29th, a three-year old boy, the son of Mrs. N. L. Lambert. November 5th, Sarah Cohen, five years old. November 13th, Eva Forsyth, three years ; all playing with matches.

During the year the department has been called upon to mourn the loss of three of its members. January 19th, John W. Abbott, a call member of Engine No. 2. He joined the department in 1865, as member of Engine No. 3 and joined Engine No. 2, in 1872.

March 12, John Angluin joined the department in 1883, as call member of Engine No. 1, transferred to Engine No. 3, in 1887, as permanent member.

April 24, Halsey J. Foster joined the department in 1870 as call member of Hose 4, in 1879 was made permanent member of Truck 2, transferred to Truck 1, in 1888.

Their records as members, won for them the respect of the whole department.

Several casualties have occurred to the members of the department the past year, but fortunately none have resulted fatally. William King, Hose 4, J. Blackburn, and F. W. Simons, Truck 3, Capt. J. L. Flagg, J. Cowell, W. H. Halstead, twice; and J. W. Halstead, Patrol Company, Capt. E. W. Bartlett, Truck 2, T. Welch, Hose 7, P. Emerson, Hose 6, H. Coulam, Hose 3, and the Chief.

LOWELL FIREMEN'S FUND ASSOCIATION.

This benevolent association was organized December 17, 1853, for the purpose of affording relief to such of its members as should receive injuries while in the discharge of their duties. The income is derived from an annual assessment upon each member, and by donations from citizens and others; and in behalf of the association, I would return thanks to all of those who have aided them in the past.

The following statement shows the amount standing to the credit of the association January 1, 1892.

Cash on hand May 1. 1891.....	\$14,366 40
Cash received to January 1, 1892.....	1,630 06
Total	<hr/> \$15,996 46
Cash paid out to January 1, 1892.....	186 00
Balance on hand January 1, 1882.....	<hr/> \$15,810 46

CONCLUSION.

In conclusion, I desire to express my appreciation to my Assistant Engineers, Officers and Members of

the several Companies, for their fidelity and bravery, and for the prompt and efficient manner in which they have responded to all alarms; the support and goodwill manifested to me on all occasions, and their efforts to sustain the reputation of the Department. I desire also, to return my sincere thanks to His Honor, Mayor Fifield, the Board of Aldermen and Members of the Common Council, for the interest manifested, and the support given to the requirements of the Department during the year; to the Committee on Fire Department for their hearty co-operation in all matters tending to the improvement of the Department; to the Chief and other members of the Police Force for their assistance at fires and on all other occasions; to the City Clerk, City Auditor, Superintendents of the different departments, and all others with whom I have had pleasant intercourse, will please accept my sincere thanks.

Respectfully submitted,

EDWARD S. HOSMER,

Chief Fire Department.

Schedule of Fires which have occurred in the City of Lowell during the Year ending December 31, 1891.

Date 1891.	Time.	Signal	Location.	Wood, Brick or Stone.	Owned by	Occupied by	Occupied as	Loss.	Insurance	Insurance Paid.	Cause of Fire.	Remarks.
July 4.	12.40 a. m.	52	Cabot Street	Wood.	J. H. Kimball	C. Brown	Fruit Store and Tenement	\$160.00 241.25	\$1,000 975.	\$160.00 241.25	Fire crackers set fire works.	
" 4.	5.00 p. m.	Still.	Off West 3d Street	"	L. R. J. Varnum	J. Lease	Tenement				Shavings in cellar.	Hose 5 responded.
" 7.	7.31 p. m.	21	Kirk St. Ave.	"	W. H. Parnum	Several Families.	"				Kerosene oil lamp explosion.	
" 8.	7.49 p. m.	13	Merrimack Street	Brick.	Mass. Corporation	Mrs. L. Wilde	"				Curtain and gas jet	
" 11.	4.16 p. m.	5	Rock Street	Wood.	D. Lovejoy & Son	D. Lovejoy & Son	Store Room	10.00		10.00	Sparks set roof.	
" 13.	12.45 p. m.	Still.	Market Street	"	Mrs. Cosgrove	Several Families.	Tenement				Defective chimney	Hose 8 responded.
" 13.	6.48 p. m.	7	Merrimack Yard	Brick.	Mer'k Corporation	Mer'k Corporation	Print Room	300.00		300.00	Combustion chloride soda	
" 14.	11.12 a. m.	Still.	Middle St. Alley	Wood.	E. N. Nichols	E. N. Nichols	Shed				Boys and matches	Engine 3 and Truck 3 responded.
" 14.	11.35 a. m.	Brick.	Merrimack Street	"	A. C. Wheelock	Several Families.	Tenement				Shavings behind stove.	
" 15.	9.14 a. m.	84	Marshall Street	Wood.	T. H. Elliott	Mrs. Tucker	"				Boys, matches and window screen.	
" 17.	3.38 a. m.	45	Off School Street	"	Doherty Bros.	Doherty Bros.	Foundry				Combustion of flasks.	
" 20.	3.45 p. m.	5	Fletcher Street	"	Howe Bros.	"	Shed				Boys and matches.	
" 21.	5.17 p. m.	Tel.	Church Street	"	E. D. Fletcher	Mrs. Barrymore	Tenement				Boys, matches and clothes.	
" 25.	11.48 p. m.	54	School Street	"	Davis & Sargent	Unoccupied	Lumber Yard				Incendiary.	
" 27.	1.30 p. m.	33	Wilder Street	Wood.	Fred Nichols	Fay Bros. & Hosford	Tenement				Shavings and match.	
" 29.	2.09 p. m.	53	Central Street	"	Fay Bros. & Hosford	W. R. Wilson	Store Room	718.50	9,000	718.50	Combustion in store room.	
Aug. 8.	2.04 a. m.	7	Dutton Street	Brick.	H. Emery	J. Flynn	Sewing Machine				Combustion of rags.	
" 8.	12.50 p. m.	19	Chapel Street	Wood.	M. Fox Heirs.	Several Families.	Tenement	25.00			Defective chimney.	
" 9.	12.29 a. m.	23	Coburn Street	"	J. P. Ritchie	J. P. Ritchie	"				Rum, matches and clothes.	
" 10.	8.52 p. m.	3	Broadway	"	J. W. Doyle	"	"				Shavings in basement.	
" 13.	1.30 a. m.	138	Gorham Street	"	R. Dobbins	"	"				Unknown.	
" 14.	8.08 a. m.	163	Tanner Street	"	J. Nesmith Heirs	Several Families.	Boiler shop.	8,682.00	12,650.	8,682.00	Incendiary.	
" 16.	1.09 a. m.	131	E. Merrimack St.	"	C. McManus	Lothrop & Cunningham	Store and Tenement				Incendiary.	
" 16.	1.55 a. m.	131	Davidson Street	Brick.	Wm. Wyman Heirs	"	Photograph Gallery	292.95	17,000.	292.92	Little girl and match.	
" 16.	11.00 a. m.	21	Merrimack Street	"	M. Bradley	"	Tenement				Chimney.	
" 18.	10.49 a. m.	39	Willie Street	Wood.	R. Harkins	"	"				Sparks set roof.	
" 18.	2.10 p. m.	37	Newhall Street	"	Davis & Sargent	"	"	250.00	7,900.	250.00	Incendiary.	
" 22.	10.12 p. m.	54	School Street	"	A. C. Skinner	Mrs. C. Murphy	Tenement	40.00	1,000.	40.00	Unknown, clothes in closet.	
" 25.	8.37 a. m.	Tel.	Lee Street	Wood.	"	"	"	100.00	1,000.	100.00	Unknown, clothes in another closet.	Engine 3 responded.
" 25.	9.10 a. m.	Still.	"	"	"	"	"	"	"	"	Smoke from boiler followed up st'm pipe	
Sept. 5.	10.37 p. m.	37	Merrimack Street	Brick.	R. R. Bank	Several Occupants.	Bank and offices				Kerosene oil lamp exploded.	
" 8.	8.17 p. m.	129	Lawrence Street	Wood.	H. Roberts	H. Roberts	Bakery	5,000.00	3,380.	3,380.00	Unknown; supposed incendiary.	
" 11.	1.15 a. m.	54	Dracut	"	W. P. Foye	Davis & Sargent	Tenement and stable	100.00	6,000.	100.00	Incendiary.	
" 11.	1.15 a. m.	54	Off School Street	Wood.	J. B. Swift	"	Tenement	365.00	1,200.	365.00	Caught from another fire.	
" 12.	7.18 p. m.	46	Bridge Street	"	E. Hapgood	O. O'Brien	Druggist				Screen caught from gas jet.	
" 13.	3.47 p. m.	61	Lawrence Street	"	"	"	Store house for rags.	100.00			Combustion.	
" 14.	7.40 p. m.	Still.	Hurd Street	"	Mrs. St. George	"	Tenement				Curtain from gas jet.	Patrol Co. responded.
" 17.	6.06 p. m.	53	Middlesex Street	Brick.	Hoyt & Shedd	Foster & Brackett	Cloak and Carpet store	659.00	14,000.	659.00	Gas jet on pile of rubbish.	Investigated.
" 18.	10.33 p. m.	Tel.	"	"	"	"	"				Unknown	
" 18.	7.40 p. m.	Aut.	Shattuck Street	Wood.	Card Clothing Co.	Card Clothing Co.	Card Clothing manuf'g				Thermostat overheated.	
" 19.	12.29 a. m.	53	Tyler Street	"	B. Gorman	B. Gorman	Tenement	81.00	2,500.	81.00	Matches or smoking in water closet.	Hose 8 responded.
" 20.	1.10 p. m.	Still.	Merrimack Street	"	"	"	Bridge				Cigar stub	
" 20.	1.43 p. m.	163	Tanner Street	Wood.	D. Gage	D. Gage	Coal shed				Locomotive sparks set birds nest	
" 26.	8.40 p. m.	Still.	Market Street	"	J. F. Connelly	J. F. Connelly	Tenement				Defective chimney	Engine 3 responded.
" 26.	11.07 p. m.	54	"	"	"	"	"				False alarm.	
Oct. 1.	2.23 a. m.	61	Lawrence Street	Brick.	Belvdre Woolen Mill	Mills No. 2	Store house				Combustion.	
" 1.	11.30 a. m.	Still.	Buras Street	Wood.	Mrs. J. Ryan	"	Tenement				Smoke coming from window.	Hose 7 responded.
" 2.	5.05 p. m.	13	Hancock Ave.	"	Manning & Leighton	Manning & Leighton	Stable	200.00			Chimney	Donaldson caught.
" 2.	6.34 p. m.	24	Prescott Street	"	Atherton Machine Co.	Atherton Machine Co.	Store room	500.00		500.00	Sparks set roof	Out of the city.
" 5.	7.52 p. m.	61	Fewksbury	"	Wameit Power Co.	E. Hapgood	Rag picker	535.00	4,000.	535.00	Caught in Picker.	
" 7.	10.53 a. m.	23	Lawrence Street	"	Mary A. Cox	"	Out house				Boy and matches.	
" 7.	11.15 a. m.	23	Fulton Street	"	I. F. Pead	Unoccupied	Stable				"	
" 12.	10.41 p. m.	115	Lakeview Avenue	"	E. A. Carter	Unoccupied	Tenement	900.00	800.	800.00	Smoking or matches in basement.	
" 13.	1.15 a. m.	115	Meadowcroft St.	"	"	"	"				Rekindled.	
" 16.	1.19 a. m.	54	Off School Street	"	Mrs. L. H. Wilson	F. P. Cheney	Lumber shed and box	3,090.00	5,900.	3,090.00	Incendiary.	
" 20.	1.15 p. m.	222	"	"	Casper Ransdowf	"	Manufacturing	965.03	2,000.	965.03	"	
" 26.	6.48 p. m.	56	"	"	C. S. Dodge	"	Tenement	33.00	500.	33.00	Damage from other fire.	
" 27.	9.02 a. m.	37	"	"	"	"	"	20.00	6,000.	20.00	"	
" 28.	4.25 a. m.	7	City Hall Ave.	Brick.	C. Hovey Heirs	Several Families.	Tenement				No school.	
" 30.	4.47 p. m.	Still.	Kinsman Street	Wood.	Callahan & Gannon	"	"	67.30	2,000.	67.30	Naptha torch exploded.	
Nov. 1.	12.15 p. m.	14	Dummer Street	"	Mrs. Pendergast	Mrs. Pendergast	Shed and out house	75.00	500.	75.00	Boy and matches.	
" 1.	11.22 p. m.	67	Central Street	"	A. W. Dows	Several Families.	Tenement				Smoking or matches; carelessness.	Patrol responded.
" 2.	12.29 p. m.	64	Fayette Street	"	P. Melen	"	"				Chimney	
" 2.	8.08 p. m.	Still.	Cumberland Road	"	Wm. Traversy	Wm. Traversy	Tenement and stable	1,730.00	2,200.	1,730.00	Sparks set roof.	
" 2.	10.10 p. m.	121	Beacon Street	"	J. R. Hayes	"	"				Supposed tramps in stable.	
" 2.	10.15 p. m.	2d.	Central Street	Wood.	Talbot & Co.	"	Awning				Brush.	Patrol responded.
" 2.	10.15 p. m.	42	Western Ave.	"	H. Whitney	"	Lumber shed	4,290.00	4,650.	4,290.00	Electric light wire	
" 6.	4.35 p. m.	Tel.	Fort Hill	Brick.	Burnham & Davis	Amraytoon Tube Co.	Lumber yard	33,800.00	26,100.	25,800.00	Incendiary.	
" 7.	1.55 p. m.	Tel.	Riverside Street	Wood.	J. A. Coram	Davis & Sargent	Tube Mfg. Co.	211.00	45,085.	211.00	Damage from other fire.	
" 7.	5.00 p. m.	Still.	Leverett Street	"	Locks & Canals	"	Saw Mill				Sparks from other fire set roof.	
" 8.	5.33 p. m.	Tel.	Riverside Street	Wood.	Geo. Chase	Geo. Chase	Match Mfg.				Brush.	Hose 9 responded.
" 9.	5.16 p. m.	9	Market Street	Wood.	J. McDermott	Several Families	Tenement	25.00	2,000.	25.00	Kettle of brimstone caught fire	
" 9.	5.55 p. m.	Still.	Hudson Street	"	T. Knowles	"	"				Brush	
" 10.	5.37 p. m.	48	"	"	"	"	"				Matches and clothes in closet.	Hose 6 responded.
" 11.	7.05 p. m.	Still.	Central Street	"	Talbot & Co.	"	Awning				Chimney	Two little boys caught.
" 11.	7.40 p. m.	39	"	"	"	"	"				False alarm.	Patrol responded.
" 13.	6.53 p. m.	Still.	Suffolk Street	Wood.	Mrs. K. Murphy	Several Families	Tenement	20.00	3,750.	20.00	Electric light wire	
" 14.	2.05 a. m.	Still.	Plain Street	"	Dr. Heald	"	Swing Mfg.	49.00	225.	49.00	Candle and clothes in closet.	Hose 9 responded.
" 18.	10.15 p. m.	125	"	"	"	"	"				Unknown	
" 20.	8.43 p. m.	14	Suffolk Street	Wood.	Dr. G. C. Osgood	Several Families	Tenement				Chimney.	
" 21.	11.06 a. m.	4	Andover Street	"	A. Billingsley	"	"				Kerosene oil lamp exploded.	
" 25.	3.20 a. m.	16	Dutton Street	"	Wam. Steam Mills Co	"	Boiler room				Overheated boiler set roof.	
" 30.	5.00 a. m.	53	Rogers Street	"	J. M. G. Parker Heirs	T. J. Sparks	Druggist	60.00	9,000.	60.00	Wooden spit box.	
" 30.	11.59 a. m.	28	Cabot Street	Brick.	J. F. Noyes	Several Families	Tenement				Rats and matches.	
" 30.	2.08 p. m.	16	Merrill Street	Wood.	Lawrence Corporation	"	"	Not Settled			Clothes back of stove.	
" 30.	10.13 p. m.	65	Lilley Avenue	"	Wm. Gaunt	F. Paul	"				Matches and clothes in closet.	
Dec. 1.	12.23 a. m.	7	Dutton Street	"	I. F. Pead	Mrs. Bagley	"				Kerosene oil lamp exploded.	
" 5.	5.13 p. m.	13	Paige Street	"	P. Guckien	Mrs. Guckien	"				Combustion of old rags.	
" 6.	9.29 p. m.	13	Merrimack Street	Brick.	T. Nesmith	Mrs. McLeary	Boarding house	186.00	4,000.	186.00	Waste paper in fire place.	
" 7.	5.43 a. m.	Aut.	Walker Street	Wood.	F. A. Hildreth Heirs	P. J. Hoar	Lawyer's office				Thermostat overheated by steam.	
" 9.	12.38 p. m.	Tel.	Adams Street	"	Lamson C. Carrier Co	Lamson C. Carrier Co	Store shed	350.00	2,000.	350.00	Sparks set roof.	
" 9.	6.10 p. m.	Still.	Merrimack Street	Brick.	J. O'Brien Heirs	Several Families	Tenement				Chimney	Engine 3 and Truck 3 responded.
" 10.	11.48 a. m.	3	Fulton Street	Wood.	A. C. Taylor	D. L. Page Co	Restaurant				Sparks set roof.	
" 10.	3.51 p. m.	Aut.	Walker Street	Brick.	J. C. Bachelder	Unoccupied	Tenement				Sparks set roof.	
" 11.	11.43 a. m.	48	Stevens Street	"	Lamson C. Carrier Co	Lamson C. Carrier Co	Paint shop				Varnish pot set by gas jet.	
" 12.	7.32 a. m.	125	Market Street	Wood.	R. G. Bartlett	P. Flannigan	Tenement				Grass set by boys.	Hose 5 and Chemical B responded.
" 12.	5.45 p. m.	Still.	First Street	"	Locks & Canals	"	"				Child, matches and lounge.	
" 12.	6.37 p. m.	125	Market Street	Wood.	Haverlin Heirs	Several Families	Tenement				Brush	
" 13.	5.20 p. m.	Still.	Suffolk Street	"	Locks & Canals	"	"				Matches and bed.	Hose 8 responded.
" 13.	9.41 p. m.	67	Dracut	Wood.	"	"	"				Boys set grass.	
" 13.	11.20 p. m.	Still.	Lee Street	Stone.	St. Joseph's Church	Unoccupied	Tenement				Incendiary	Out of the city.
" 14.	1.52 a. m.	9	Adams Street	Wood.	Thomas Fay	Several Families	Tenement				Candles left burning	Engine 3 responded.
" 16.	12.10 a. m.	15	Off Moore Street	"	Mass. Corp.	"	"				Matches, rum and bed.	
" 17.	3.26 a. m.	32	Dracut	Wood.	Mrs. H. R. Barker	W. L. Fuller	Stable	150.00		150.00	Combustion	Out of city. 34 cows, 2 hrs, 40 tons hay.
" 17.	2.15 p. m.	Still.	Adams Street	"	A. McFadden	"	"	Not Settled			Supposed incendiary	Hose 8 responded.
" 18.	11.34 a. m.	7	Dutton Street	Brick.	Mer'k Corporation	Mer'k Corporation	Tenement				Defective chimney	
" 19.	8.02 a. m.	Tel.	Church Street	Wood.	T. P. Hall	Mer'k Corporation	Boarding house	60.00		60.00	Overheating; stove set floor.	
" 20.	12.22 a. m.	125	Market Street	"	Haverlin Heirs	Several Families	Tenement				Incendiary.	
" 20.	5.45 p. m.	Still.	Palmer Street	Brick.	A. G. Pollard	Unoccupied	"				Matches or smoking in cellar.	Engine 3 responded.
" 23.	3.09 a. m.	131	Davidson Street	Wood.	E. S. Hyland	"	Blacksmith shop				Kerosene oil lamp explosion	
" 25.	8.24 a. m.	25	Tremont Street	"	M. A. Daniels	Several Families	Tenement	186.82	5,100.	186.82	Combustion.	
" 30.	7.45 a. m.	222	"	"	"	"	"				Defective chimney.	
" 30.	6.38 p. m.	28	Cheever Street	Wood.	Several Families	"	Tenement				No School.	Hose 4 responded.
" 31.	11.15 a. m.	Still.	High Street	"	Brady Heirs	"	"				Chimney.	
" 31.	5.02 p. m.	35	Lawrence Street	"	A. V. Partridge	H. T. Murray	Boarding house	114.00	5,200.	114.00	Defective stove funnel.	Patrol Co. responded.
" 31.	5.30 p. m.	Still.	Edgerley's Court	"	J. B. Trueworthy, Agt	"	Tenement				Chimney	
" 31.	7.22 p. m.	53	William Street	"	R. G. Bartlett	"	"				"	

Loss, \$176,736.13.

Insurance, \$1,008,005.00.

Insurance Paid, \$163,826.13.

Loss above Insurance, \$12,910.00.

FIRE DEPARTMENT.

JANUARY 1, 1891.

CHIEF ENGINEER.

EDWARD S. HOSMER, { Office, Palmer Street Engine House.
 { Residence, 12 Livermore Street.

ASSISTANT ENGINEERS.

JAMES F. NORTON, . . . Residence, 18 Ames Street.
GEORGE F. SALMON, . . . Residence, 24 Mt. Washington Street.
EDWARD MELOY, . . . Residence, 86 Charles Street.
HENRY W. BURTON, . . . Residence, 4 Kimball Avenue.

TELEGRAPH OPERATOR.

GEORGE B. WHITNEY, . Residence, Palmer Street Engine House.

COMMITTEE ON FIRE DEPARTMENT, 1891.

Aldermen—Dickinson and Cassidy.
Councilmen—Marren, Driscoll and Baxter.

ENGINE COMPANY, No. 1.

TWELVE MEMBERS.

HOUSE ON GORHAM STREET.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
15.....	Foreman	C. D. Foley.....	37	Carpenter.	31 Newhall Street.
11	Asst. Foreman.....	J. J. Jennings.....	35	Permanent.	Engine House.
1.....	Clerk	Geo. W. Lovett.....	41	Driver, Wagon.....	Engine House.
112.....	Engineer.....	J. W. Jantzen.....	38	Permanent	Engine House.
12....	Driver	R. O'Connell.....	36	Driver, Engine.....	Engine House.
17.....	Asst. Engineer	T. McNamara.....	47	Machinist	Cor. George & Tyler
19.....	Hoseman	G. M. Cleary	41	Carpenter.....	18 Livingston Street.
16.....	Hoseman	T. Caruthers.....	46	Stamper	Engine House.
14.....	Hoseman	P. Curtin	39	Moulder	141 Lawrence Street.
13.....	Hoseman	S. O'Connell.....	40	Plasterer.....	30 Fay Street.
18.....	Hoseman	T. Collins.....	35	Mason	410 Gorham Street.
10.....	Hoseman.....	W. Dolan.....	29	Permanent	Engine House.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Engine Company, No. 1.

Engine, built by Union Machine Company, of Fitchburg, Mass., in 1872; has two double acting steam cylinders, $7\frac{1}{8}$ inches in diameter, 8 inch stroke; two double acting pumps, $4\frac{3}{8}$ inches in diameter, arranged to work separately or together; weight when loaded, 7,575 pounds. 1 one-horse wagon, built by Abbott-Downing Co., of Concord, N. H.; 4 horses. 1 set double and 1 single harness, one pair lead bars, 4 blankets, 1 hose sleigh, 1 fuel wagon, 1 four-way chuck, 1 branch connection, 3 pipes with stop nozzles, 1 $2\frac{1}{2}$ inch cap, 1 $5 \times 2\frac{1}{2}$ reducer. 4 small reducers, 6 spanners, 8 lanterns, 4 wrenches, 6 ladder straps, 4 bars, 2 axes, 1 bucket, 1750 feet $2\frac{1}{2}$ inch cotton hose, 100 feet 1-inch rubber hose, 1 set blocks, 1 extinguisher, 7 beds and bedding, one mirror, 2 bureaus, 18 chairs, 3 shovels, one fork, 4 brooms, 1 30-foot rope, 2 pails, 1 12 foot ladder, 1 steam boiler, 1 ash can, 1 coal hod, 4 boxes, 2 blocks, 1 jack screw, 1 carriage jack, 1 copper goose-neck, 1 basket, 1 work bench and vise, 6 spittoons, 1 chisel, 1 pair of shafts, 2 oil cans, 12 badges, 12 sets buttons, 1 hose washer, 100 feet 1-inch hose, 1 three horse pole, and all tools for cleaning horses and repairing Engine.

ENGINE COMPANY, No. 2.

HOUSE ON BRANCH STREET.

TWELVE MEMBERS.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
20.....	Foreman	A. C. Stearns.....	51	Permanent	Engine House.
21....	Asst. Foreman.....	F. B. Acres.....	37	Permanent	Engine House.
2.....	Clerk	H. Boynton.....	40	Driver, Carriage....	Engine House.
29.....	Engineer.....	C. S. Hibbert.....	46	Permanent	Engine House.
90.....	Driver	M. J. Burns.....	38	Driver, Engine.....	Engine House.
28.....	Asst. Engineer.....	E. M. Foster.....	32	Machinist	148 Westford Street.
22.....	Hoseman.....	H. P. Morrison.....	32	Machinist.	Merrimack Street.
23.....	Hoseman.....	E. E. Maynard.....	30	Clerk	56 Branch Street.
27.....	Hoseman.....	A. S. Maynard.....	38	Carpenter	18 E. Pine Street.
25....	Hoseman.....	G. A. Bennett.....	51	Roofer.....	Carleton & Marshall.
24.....	Hoseman.....	W. L. Hill.....	26	Bottler	6 Royal Street.
26.....	Hoseman.....	C. E. Alway.....	27	Carpenter	45 Summer Street.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Engine Company, No. 2.

Engine, built by Manchester Locomotive Works, Manchester, N. H., weight when loaded, 7,600 pounds; $6\frac{1}{2}$ inch cylinder, 8 inch stroke, $4\frac{1}{2}$ inch double-acting pumps; two horse hose carriage, built by Leverich & Co., of New York; 1,900 feet $1\frac{1}{2}$ inch cotton hose, 50 feet $\frac{3}{4}$ -inch rubber hose, 1 hose sleigh, 1 fuel wagon, 5 horses, 5 harnesses, 5 blankets, 1 two-way chuck and reducer, 1 four-way chuck, 1 branch connection, 4 pipes, 6 spanners, 6 ladder straps, 2 hydrant wrenches, 1 axe, 2 bars, 1 jackscrew, 1 pair lead bars, 1 three-horse pole, 6 coal boxes, 12 chairs, 3 mirrors, 3 clocks, 1 work bench and vise, 5 beds and bedding, 1 lathe, heater and tank, steam boiler and radiators, 2 sets blocks, 2 ash cans, 1 table, 16 badges, 16 set buttons, 1 hose washer, 1 pair steps, 1 pair skids for loading engine and hose carriages, wagons on cars, and all tools for cleaning horses and repairing engine and 1 extinguisher.

ENGINE COMPANY, No. 3.

TWELVE MEMBERS.

HOUSE ON PALMER STREET.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
30.....	Foreman.	F. Hoyt.....	43	Permanent	Engine House.
31.....	Asst. Foreman.....	O. A. Knapp.....	27	Permanent	Engine House.
3.....	Clerk.	L. C. Brainard.....	33	Driver, Wagon.....	Engine House.
33	Engineer	M. I. Collins.....	36	Engineer	Engine House.
133.....	Driver	B. C. Reed	38	Driver, Engine.....	Engine House.
34.....	Asst. Engineer.....	J. G. Merchant	53	Engineer.....	188 Westford Street.
37.....	Hoseman.....	F. E. Roark	42	Lighter	80 Middle Street.
38.....	Hoseman.....	Geo. Halstead.....	34	Painter.....	64 High Street.
35	Hoseman	T. Brown.....		Clerk	
32.....	Hoseman.....	T. Welch.....	34	Piper	43 Bartlett Street.
39.....	Hoseman.....	H. Coulam.....	38	Second Hand.....	Hamilton Corp.
36.....	Hoseman	A. Dearth.....		Carpenter	Dutton Street.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Engine Company, No. 3.

Engine, built by Manchester Locomotive Works, Manchester, N. H., weight when loaded, 9,300 pounds; 35 feet suction hose, with hydrant couplings, 1 one-horse hose wagon, 1 hose sleigh, 4 horses, 1 set three horse hitch and one single harness, 4 halters, 4 blankets, 1650 feet 2½-inch cotton hose, 1 four-way chuck and reducer, 1 reducer and cap, 1 six-way Lowry chuck, 4 pipes, 2 stop nozzles, 2 branch connections, 2 hydrant wrenches, 4 spanners, 1 bar, 1 shovel, 4 ladder straps, 6 lanterns, 7 beds and bedding, 2 mirrors, 2 clocks, 15 chairs, 1 hose-pipe, 1 jackscrew, 1 monkey-wrench, 1 carriage jack, 12 badges, 12 set buttons, 1 hose washer, 1 extinguisher, and all tools for cleaning horses and repairing Engine.

ENGINE COMPANY, No. 4.

TWELVE MEMBERS.

HOUSE ON HIGH STREET.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
40.....	Foreman	J. J. Quinlan.....	39	Permanent	Engine House.
47.....	Asst. Foreman	J. E. Burns.....	31	Market	7 Prescott Corp.
4.....	Clerk	W. King.....	49	Driver, Wagonh.....	Engine House.
41....	Driver	J. J. Harrington....	41	Driver, Engine.....	Engine House.
134.....	Engineer	F. G. Collins.....	33	Permanent	Engine House.
45.....	Asst. Engineer.....	Chas. Morse.....	50	Engineer.....	58 Fairmount Street.
44.....	Hoseman	M. Connors.....	41	Plasterer.....	55 Pleasant Street.
42.....	Hoseman	J. E. Sullivan.....	39	Permanent	Engine House.
43.....	Hoseman	James Dolan.....	51	Painter	75 Concord Street.
46.....	Hoseman	J. P. Smith.....	28	Clerk.....	77 Concord Street.
48.....	Hoseman	T. Tighe.....	34	Finisher	39 Concord Street.
49.....	Hoseman.:	J. Banford.....	34	Mason	48 Charles Street.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Engine Company, No. 4.

Engine, built by Manchester Locomotive Works, Manchester, N. H., weight, 8,000 pounds; $6\frac{7}{8}$ -inch cylinder, 8-inch stroke, $4\frac{1}{2}$ -inch double-acting pumps; 1 one-horse hose wagon, built by Abbott Downing Co., Concord, N. H.; 1 one-horse sleigh, 4 horses, 1 set three-horse and single harness, 1,500 feet cotton hose, 50 feet $\frac{3}{4}$ -inch rubber hose, 1 carriage jack, 2 clocks, 2 mirrors 1 table, 18 chairs, 2 dusters, 2 shovels, 4 pails, 5 spittoons, 1 fuel wagon, 6 beds and bedding, 1 bureau, 12 set buttons, 16 badges, 12 spanners, 5 ladder straps, 1 jackscrew, 6 coal boxes, 1 $5 \times 2\frac{1}{2}$ -inch reducer, 1 hose washer, 1 extinguisher, 4 blankets, 1 bench and vise, 1 steam boiler and radiators, 1 heater and boiler, 1 pair steps, 3 bars, 3 pipes, 2 pair reducing coupling, 1 three-horse pole, and all tools for cleaning horses and repairing Engine.

HOSE COMPANY, No. 5.

NINE MEMBERS. HOUSE ON FOURTH STREET.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
50.....	Foreman	C. F. Hemingway ..	42	Permanent.	Hose House.
55	Asst. Foreman.....	F. Mansur.....	42	Carpenter.	45 Fifth Street.
5.....	Clerk	A. E. Kidder.....	36	Driver	Hose House.
54.....	Hoseman	A. Merrill.....	54	Truckman.....	25 Fifth Street
51.....	Hoseman	E. L. Hewes.....	30	Tinsmith.....	Hose House.
56.....	Hoseman	F. D. Mcrey.....	27	Carpenter..	11 Methuen Street.
53.....	Hoseman	J. McCafferty.....	28	Permanent	Hose House.
57.....	Hoseman	J. McKissock.....	39	Carpenter	Beacon Street.
52.....	Hoseman.....	Fred Mansur.....	33	Carpenter	13 Third Street.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Hose Company, No. 5.

One two horse hose carriage, built by the Manchester Locomotive Works, Manchester, N, H.; 2 horses, 1 pair harnesses, 2 bridles, 1 blankets, 1,750 feet $2\frac{1}{2}$ -inch cotton hose, 25 feet $\frac{3}{4}$ -inch rubber hose, 2 pipes and stop nozzles, 1 reducer, 1 two-way and 1 four-way chuck, 1 branch connection, 1 reducing coupling, 1 cap, 8 spanners, 2 wrenches, 6 lanterns, 2 bars, 1 ladder, 1 axe, 1 carriage jack, 4 beds and bedding, 20 chairs, 1 table, 1 clock, 2 pails, 3 shovels, 3 brooms, 2 forks, 1 duster, 1 sifter, 3 ash cans, 2 oil cans, 3 spittoons, 1 set blocks, 140 feet rope, 1 pulley, 1 hose sleigh, 1 fuel wagon, 1 boiler and radiators, 10 badges, 9 set buttons, 1 pair steps, 1 hose washer, and all tools for cleaning horses.

HOSE COMPANY, No. 6.

HOUSE ON CENTRAL STREET.

NINE MEMBERS.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
61.....	Foreman	E. Cunningham ...	44	Steam Fitter	82 Charles Street.
60.....	Asst. Foreman.....	C. Riley.....	36	Permanent	Hose House.
6.....	Clerk	E. O'Connell.....	34	Driver	Hose House.
62.....	Hoseman	A. Gibson.....	35	Permanent	Hose House.
63....	Hoseman	P. Emerson.....	33	Carpenter.....	2 Madison Street.
64.....	Hoseman	E. Crowley.....	37	Coppersmith	Hose House.
65.....	Hoseman	P. McLaughlin.....	36	Tinsmith.....	14 Keene Street.
66.....	Hoseman	J. Freeman.....	34	Lamp Lighter.....	19 Keene Street.
67.....	Hoseman.....	J. Emerson.....	29	Upholsterer	2 Floyd Street.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Hose Company, No. 6.

One two-horse hose carriage with poles and shafts, 1 hose sleigh, 2 horses, 1 set double harness, 2 blankets, 2 forks, 2 brooms, 1,600 feet 2½-inch cotton hose, 50 feet ¾-inch rubber hose, 2 pipes and stop nozzles, 6 lanterns, 1 axe, 1 four-way and 1 two-way chuck, 2 wrenches, 1 reducing coupling, 1 cap, 4 spanners, 3 ladder straps, 1 branch connection, 2 dusters, 1 carriage jack, 6 beds and bedding, 10 chairs, 1 carpet, 4 spittoons, 2 clocks, 2 oil cans, 1 extinguisher, 2 shovels, 2 mirrors, 2 pails, 1 hose washer, 1 pair steps, 1 wagon, 2 bridles, 1 table, 9 badges, 9 set buttons, 1 boiler and radiators, and all tools for cleaning horses.

HOSE COMPANY, No. 7.

HOUSE ON FLETCHER STREET.

NINE MEMBERS.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
70.....	Foreman	D. J. Hurley.....	40	Permanent	Hose House.
73.....	Asst. Foreman.....	E. W. Fletcher.....	38	Moulder	68 L. M. S. Corp.
7.....	Clerk	J. A. Fletcher	35	Driver	Hose House.
71.....	Hoseman.....	T. H. Rogers	40	Permanent	Hose House.
75.....	Hoseman.....	T. F. Welch.....	42	Cabinet Maker.....	49 Common Street.
78.....	Hoseman.....	J. J. Murray.....	40	Cabinet Maker.....	91 Bowers Street.
74.....	Hoseman.....	D. W. Russell.....	38	Knitter	15 Oliver Street.
72.....	Hoseman.....	J. Musick.....		Blacksmith.....	
97.....	Hoseman.....	R. E. Burns.....	26	Cabinet Maker.....	16 Nichols Street.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Hose Company, No. 7,

One one-horse hose wagon, built by Abbott Downing Company, of Concord, N. H.; 1 engine built by Hunneman and Company, in 1866, (in reserve); 1 horse hose sleigh, 1 harness, 1 bridle, 1 extinguisher, 2,050 feet 2½-inch cotton hose, 2 pipes and stop nozzles, 10 spanners, 1 four-way and 1 two-way chuck, 2 reducers, 2 bars, 3 brooms, 1 carriage jack, 2 pails, 1 connection with cap, 3 ladder straps, 1 duster, 1 ladder, 1 step ladder, 1 brush, 7 lanterns, 8 spittoons, 2 shovels, 20 chairs, 4 beds and bedding, 2 axes, 1 ash can, 2 clocks, 2 mirrors, 1 gas stove, 1 boiler and radiator, 12 badges, 11 set buttons, 1 hose washer, 4 tons steamer coal, 1 bench and vise, and all tools for cleaning horses.

HOSE COMPANY, No. 8.

HOUSE ON MERRIMACK STREET.

EIGHT MEMBERS.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
150.....	Foreman	Wm. J. Flynn	39	Permanent	Hose House.
151.....	Clerk	Fred Boynton.....	30	Driver	Hose House.
86.....	Hoseman	D. H. Crowley.....	31	Permanent	Hose House.
87... .	Hoseman.....	A. L. Cadwell	28	Insurance Agt.....	54 Tremont Street.
88.....	Hoseman	H. C. Dana.....	27	Machinist	64 L. M. S. Corp.
89.....	Hoseman	B. J. Dunn.....	29	Clerk	114 Adams Street.
85.....	Hoseman	L. S. Kimball.....	41	Roll Coverer... ..	16 John Street.
83.....	Asst. Foreman.....	E. F. Saunders.....	26	Baker	Hose House.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Hose Company, No. 3.

One two-horse carriage, 1 two-horse sleigh, 2 horses 1 pair of double harness, 2 bridles, 2 blankets, 1 extinguisher, 1,800 feet $2\frac{1}{2}$ inch cotton hose, 2 pipes and shut off nozzles, 6 spanners, 1 four-way chuck, 1 bar, 1 axe, 3 ladder straps, 3 mops, 3 wrenches 2 lanterns, 1 carriage jack, 3 brooms, 2 ash cans, 1 step ladder, 3 shovels, 5 cuspidores, 2 clocks, 1 water cooler, 1 mirror, 2 pails, 2 dusters, 1 rubber mat, 11 chairs, 5 beds and bedding, 5 rugs, 1 boiler and radiators, 8 badges, 3 set buttons, 1 window brush, 1 scrub bush, 1 hose washer, 1 one-half peck measure, 2 forks, 50 feet $\frac{3}{4}$ -inch rubber hose, and all tools for cleaning horses.

HOSE COMPANY, No. 9.

SIX MEMBERS.

HOUSE ON LINCOLN STREET.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
91.....	Foreman.	S. E. Bartlett.....	43	Permanent	Hose House.
92.....	Clerk	P. S. Webster	44	Driver	Hose House.
93.....	Hoseman	G. H. Chapman.....	36	Wood Dealer.....	38 Lincoln Street.
94	Asst. Foreman.....	J. Baxter.....	33	Permanent	Hose House.
95.....	Hoseman.....	J. E. Wilkins	44	Machinist	6 Main Street.
96.....	Hoseman.....	P. J. Clune.....	30	Machinist	Hose House.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Hose Company, No. 9.

One one-horse hose wagon, built by the Abbott Downing Company, of Concord, N. H.; 1 sleigh, 1 horse, 1 harness, 1 blanket, 1 four-way chuck, 1 wrench, 2 pipes and stop nozzles, 7 spanners, 1 bar, 3 ladder straps, 2 lanterns, 50 feet $\frac{3}{4}$ -inch rubber hose, 1,300 feet $2\frac{1}{2}$ -inch cotton hose, 1 carriage jack, 2 clocks, 2 mirrors, 1 table, 12 chairs, 1 ash can, 1 duster, 1 shovel, 2 pails, 5 spittoons, 5 beds and bedding, 6 badges, 1 dust pan, 1 brush, 3 brooms, 1 oil can, 5 mats, 1 extinguisher, 1 hot water heater and radiators, 1 hose washer, and all tools for cleaning horses.

TEN MEMBERS.

TRUCK COMPANY, No. 1.

HOUSE ON FOURTH STREET.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
102.....	Foreman	H. B. Downs.....	58	Carpenter	47 Hamilton Corp.
101.....	Asst. Foreman.....	Wm. Marsden.....	37	Permanent	Truck House.
100.....	Clerk	W. L. Peabody.....	43	Driver	Truck House.
105.....	Ladderman	R. W. Stickney.....	30	Janitor.....	Postoffice Block.
104.....	Ladderman	F. C. Loury.....	25	Carpenter	9 Fourth Street.
106.....	Ladderman	J. A. Pullen.....	63	Machinist.....	161 Merrimack Corp.
103.....	Ladderman	T. McCormick.....	37	Lineman	Bridge Street.
109.....	Ladderman	G. F. Sargent.....	38	Permanent	West Fourth Street.
107.....	Ladderman	Wm. Hale.....	32	Piper	Chapel Street.
108.....	Ladderman	W. N. Flagg.....	46	Carpenter	Kirk Street.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Truck Company, No. 1.

Hook and ladder truck, built by Buckley & Merritt, of New York; 1 Bangor ladder (sixty-five feet), 2 thirty feet, 1 twenty-five feet, 2 roof ladders (one fifteen, the other twenty-five feet), 1 door opener, 1 wrench, 1 twelve feet ladder, 4 forks, 4 axes, 4 buckets, 2 lanterns, 2 shovels, 1 bar, 3 horses, 1 set double harness, 2 blankets, 50 feet $\frac{3}{8}$ -inch rope, 10 chairs, 2 brooms, 3 beds and bedding, 10 badges, 10 set buttons, 1 three-horse pole, 1 pair lead bars, 1 whiffle-tree, and all tools for cleaning horses.

TRUCK COMPANY, No. 2, with CHEMICAL ENGINE ATTACHED.

HOUSE ON WESTFORD STREET.

THIRTEEN MEMBERS.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
121.....	Foreman	E. W. Bartlett.....	44	Permanent	Truck House.
120	Clerk	G. W. Alcott.....	38	Driver	Truck House.
130.....	Driver	G. A. Dickey	43	Driver Chemical.....	Truck House.
131.....	Ladderman	D. W. Hilliard.....	41	Permanent	Truck House.
132....	Ladderman	E. E. Smith.	37	Permanent	Truck House.
123.....	Asst. Foreman.....	C. A. Thompson....	47	Carpenter.....	Kimball Avenue.
125.....	Ladderman	G. E. Maynard.....	34	Carpenter	E. Pine Street.
129.....	Ladderman	Leo Miller.....	28	Box Maker.....	5 Lane Street.
127.....	Ladderman	H. A. Gardner.....	40	Moulder	25 L. M. S. Corp.
128.....	Ladderman	G. Stackpole.....	36	Clerk	66 School Street.
126.....	Ladderman	S. E. Pickering....	30	Carpenter	22 Branch Street.
122.....	Ladderman	A. I. Laughton	37	Tinsmith.....	3 Barclay Street.
124.....	Ladderman	Q. A. Foster.....	38	Machinist	34 E. Pine Street.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Truck Company, No. 2.

Hook and ladder truck, built by Jucket & Freeman, of Boston, weight, 4,500 pounds ; single-tank chemical engine rebuilt by the City, weight, 3,200 pounds ; 1 Bangor ladder (fifty-five feet long), 2 thirty-two feet, 4 roof ladders, (2 twenty-five feet, the other two twenty feet), 1 sixteen foot ladder, 6 prop hooks, 4 axes, 2 adjustable hooks for roof ladders, 2 shovels, 6 lanterns, 4 forks, 2 rakes, 1 door opener, 3 bars, 200 feet rope, 4 pails, 2 whips, 2 carriage jacks, 25 chairs, 1 table, 2 mirrors, 3 clocks, 1 duster, 1 brush, 50 feet $\frac{3}{4}$ -inch and 250 feet 1-inch rubber hose, 3 plaster hooks, 1 hay hook, 4 small hay hooks, 2 wrenches, 3 chain dogs, 3 ash cans, 5 horses, 1 pair double and one single harness, 4 blankets, 5 halter bridles, 7 beds and bedding, 13 badges, 12 sets of regulation buttons, 5 cap badges, 20 feet $1\frac{1}{2}$ inch rubber hose, 1 three-horse hitch or pole, and all tools for cleaning horses.

BABCOCK TRUCK COMPANY, No. 3, with CHEMICAL ENGINE ATTACHED.

THIRTEEN MEMBERS.

HOUSE ON PALMER STREET.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
110.....	Foreman.	F. E. Fuller.....	42	Permanent	Truck House.
141.....	Asst. Foreman.....	H. F. Harris.....	39	Permanent	Truck House.
112.....	Clerk	F. O. J. Townsend..	37	Driver	Truck House.
140	Ladderman	H. C. Fernald	38	Permanent	Truck House.
113.....	Ladderman	F. W. Simons	40	Permanent	Truck House.
111.....	Ladderman	J. H. Joyce.....	50	Permanent	Truck House.
142.....	Driver	H. A. Merrill.....	29	Driver Chemical.....	Truck House.
143	Ladderman	J. Blackburn.....	34	Permanent	Truck House.
116.....	Ladderman	W. P. Maker	27	Machinist	3 L. M. S. Corp.
117.....	Ladderman	T. Dwyer.....	28	Loom Fixer.....	13 Willow Street.
118.....	Ladderman	H. C. Wilkins		Clerk	13 Wachusett Street.
114....	Ladderman	E. Kerwin.....	42	Piper	Central & Mill.
115.....	Ladderman	W. L. Kenney.....	38	Painter	6 Carpet Corp.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Truck Company, No. 3.

Aerial truck, built by the Fire Extinguisher Co., of Chicago, in 1888, weight, 8,100 pounds; 1 two and 1 three-horse pole, 1 single tank Chemical engine rebuilt by the city, 5 horses, 1 extension ladder (eighty-five feet), 1 fifty-five and 1 sixteen feet long, 1 thirty-five feet ladder, 1 thirty, 1 twenty, 1 twelve and 1 fourteen feet long, 1 door opener, 1 bar, 4 iron stakes, 1 sledge, 3 one-hundred foot ropes, 2 forks, 2 shovels, 6 hay forks, 6 pail hooks, 1 hammer, 1 wire cutter, 4 buckets, 8 lanterns, 7 axes, 2 monkey wrenches, 1 carriage jack, 1 jackscrew, 250 feet of 1-inch rubber hose, 50 feet of 1½-inch cotton hose, 2 spanners, ½ keg of soda, 1 carboy of vitriol, 5 blankets, 1 set of three-horse and 1 set of double harnesses, 2 tables, 28 chairs, 3 clocks, 9 beds and bedding, 6 spittoons. 6 mops, 6 pails, 1 water cooler, 10 rugs, 2 mirrors, 21 badges. 10 set regulation buttons, 50 feet ¾-inch hose, and all tools for cleaning horses.

PROTECTIVE COMPANY, No. 1.

FIVE MEMBERS.

HOUSE ON WARREN STREET.

Badge.	Rank.	Name.	Age.	Occupation.	Residence.
80.....	Foreman	J. L. Flagg	56	Permanent	Protective House.
8.....	Clerk	J. Cowell.....	44	Driver	Protective House.
79.....	Asst. Foreman	W. H. Halstead....	47	Permanent	Protective House.
81....		J. W. Halstead.....	43	Permanent	Protective House.
84.....		H. B. Sanders.....	32	Permanent	Protective House.

SCHEDULE OF PROPERTY

Belonging to the City, in Care of the Protective Company.

One wagon complete, built by the Abbott Downing Co., Concord, N. H.; 1 traverse runner sleigh, 1 extra pole, 2 extra wheels, 2 horses, 1 set double harness, 4 blankets, 2 Johnson pumps, 4 extinguishers, 1 Siamese connection, 15 pounds soda, 20 pounds vitriol, 24 cans for soda, 70 bottles for vitriol, 8 brooms, 7 shovels, 4 squillgees, 3 iron pails, 3 large sponges, 2 axes, 1 pick, 2 bars, 2 hammers, 36 spikes, 2 augers, 1 lath rake, 2 monkey wrenches, 12 lanterns, 2 ten-foot folding ladders, 1 Spencer canvas chute and Dixon arrow gun, 2 dust pans, 60 gallon oil tank, 2 oil cans, 5 cap and 5 regulation badges, 5 set regulation buttons, 6 beds and bedding, 24 chairs, 3 mirrors, 2 clocks, 1 table, 1 bureau, 1 carpet, water cooler, boiler and radiators, 50 feet $\frac{5}{8}$ inch and 50 feet $\frac{7}{8}$ -inch rope, 50 feet $\frac{3}{4}$ -inch rubber hose, 79 rubber covers, 4 ash cans, 4 mops, 3 chamois skins, 3 stable pails, 1 carriage jack, 2 stable brooms, 2 1 dusters, 2 pair of steps, 1 set of blocks, 3 spittoons, and all tools for cleaning horses.

Location of Signal Boxes.

- 3—Corner of Broadway and Mt. Vernon Streets.
- 4—Dutton Street, opposite Parker & Cheney's.
- 5—Corner of Cushing and Fletcher Streets.
- 6—Corner of Little and Lewis Streets.
- 7—Corner of Market and Dutton Streets.
- 8—Corner of Westford and School Streets.
- 9—Corner of Common and Salem Streets.
- 12—Market Street, Police Station.
- 13—Corner of Prescott and Merrimack Streets.
- 14—Corner of Fayette and Andover Streets.
- 15—Bleachery Street, on Bleachery stable.
- 16—Hosford Square.
- 17—Corner of Middlesex and Walker Streets.
- 18—Junction of Hale and Lincoln Streets.
- 19—Corner of Gorham and Union Streets.
- 21—Corner of Kirk and Merrimack Streets.
- 23—Corner of Coburn and River Streets.
- 24—Corner of Middlesex and South Streets.
- 25—Merrimack Street, near Tremont House.
- 26—Corner of Fletcher and Pawtucket Streets.
- 27—Corner of Riverside and Mammoth Streets.
- 28—Corner of Hall and Aiken Streets.
- 29—Corner of Tenth and Myrtle Streets.
- 31—Corner of High and East Merrimack Streets.
- 32—Corner of Bridge and Tenth Streets.

- 33—Corner of Broadway and Walker Streets.
- 34—Lincoln Street, on Tannery.
- 35—Corner of Charles and Lawrence Streets.
- 36—City Farm, on pole.
- 37—Corner of Whipple and Kinsman Streets.
- 38—Fair Grounds, on building.
- 39—Corner of Fletcher Street and Broadway.
- 41—Corner of Wyman and Nesmith Streets.
- 42—Middlesex Street, old Engine House.
- 43—Highland Street, Edson School House.
- 45—Engine House, Branch Street.
- 46—Corner of First and Bridge Streets.
- 47—Andover Street, near B. F. Butler's driveway.
- 48—Corner of Dover and Grove Streets.
- 49—Corner of Nesmith and Chestnut Streets.
- 51—Junction of Gorham and Thorndike Streets.
- 52—Corner Moody and Austin Streets.
- 53—Central Street, near Boston & Maine Depot.
- 54—School Street, near Gas Works.
- 56—Middle Street Engine House.
- 57—Warren Street, opposite George Street.
- 61—Lawrence Street, above Stott's Mills.
- 62—Corner of Bowers and School Streets.
- 63—Corner of Hale and Howard Streets.
- 64—Corner of Third and Myrtle Streets.
- 65—River Street, near Aiken Street Bridge.
- 67—Hildreth Street, opposite Lilley Avenue.
- 68—Corner of Sixth and Fremont Streets.
- 71—Middlesex Village, opposite Hotel, on pole.
- 72—Middlesex Street, opposite Huntoon's Stable.
- 73—Mammoth Street, near City line.
- 74—Varnum Avenue.
- 81—Corner of Pine and Wilder Streets.

- 82—Corner of Chelmsford and Grand Streets.
- 83—Corner of Powell and Smith Streets.
- 84—Corner of Westford and Gates Streets.
- 85—Corner of Pine and Marlborough Streets.
- 92—Bridge Street, opposite Whitney's.
- 114—High Street, corner Porter.
- 115—Corner of Moore and South Whipple Streets.
- 121—Western Avenue, near Railroad Crossing.
- 125—Market Street, opposite Lewis Street.
- 128—Counting Room of the Tremont & Suffolk Mills (private.)
- 129—Corner of Beacon and Methuen Streets.
- 131—Corner of East Merrimack and Howe Street.
- 132—Pumping Station.
- 134—Main Street, corner of Plain.
- 135—Perry Street, Electric Light Station.
- 136—Corner of Stevens and Parker Streets.
- 138—Corner of Lundberg and Gorham Streets.
- 141—Corner of Fairmount and Talbot Streets.
- 149—Alder Street, corner of Bartlett.
- 161—Faulkner Mills, Lawrence Street (private.)
- 162—Pawtucket Street, opposite ice houses
- 163—Tanner Street, near Scannell & Wholey's office.
- 172—Corner of Appleton and Favor Streets.
- 181—Corner of Stevens and Westford Streets.
- 183—Mason, corner South Loring.
- 185—Westford Street, corner Pine.
- 214—Nesmith Street, near Rogers.
- 241—Rogers Street.

FIRE-ALARM TELEGRAPH.

Location—Engine House, Palmer Street.

GEORGE B. WHITNEY, OPERATOR.

10 Circuit Automatic Repeater, with Battery of.....	380	Cups
Miles of Line Wire.....	88	
Signal Boxes.....	86	
Engineer's Gongs.....	9	
Engine House Gongs.....	12	
Indicators.....	13	
Bell Strikers.....	9	
Gong and Indicator combined, in Police Station.....	1	
Gong in Pumping Station.....	1	

The Strikers are located as follows: Palmer Street Engine House, Varnum School House, High Street Church, Court House, No. 1 Engine House, Franklin School House, Pawtucketville Church, No. 7 Hose House and Highland School House.

One stroke dismisses, two strokes call out the entire department.

Magneto Bell Telephone Circuit.

Complete Stations.....	15
Extension Bells.....	16
Miles of Wire.....	30

SCHEDULE OF PROPERTY

Belonging to the City, in Care of Fire Alarm Operator.

One 10 circuit automatic non-interference repeater, 1 cut out testing switch board, 1 line testing machine, 11 galvanometers, 84 public and two private signal boxes (non-interfering), 9 bell strikers, 12 large gongs, 9 small gongs, 13 registers, 13 electrical arrangements for opening stall doors, 88 miles of wire, 380 cups of battery, 17 magneto call bells, 16 extension bells, 30 miles of wire, 21 electric light current protectors, 1 barrel of glass insulators, 12 pole brackets, 2 saws 2 hammers, 2 screw drivers, 2 straps with vises, 2 draw-straps and clutches, pliers, tongs, set bits and bit-stock, 3 shovels, 2 bars, 1 pick, 2 spoons, 1 tamping bar, 1 cant hook, 1 broad axe, 2 pike poles, 3 pairs of climbers, 1 deadman, 3 ladders, $\frac{1}{2}$ mile of wire 1 draw shave, fire-alarm box keys, locks, outside shells and doors to boxes, pocket relay lanterns, desk, table, chairs, dusters, chamois skin, 9 barrels blue vitriol. 1 horse, harness, blankets, 3 wagons, sleigh, etc.

SCHEDULE OF PROPERTY

Belonging to the City, in the Palmer Street Engine House.

One horse, harness, wagon and sleigh for the Chief's use, 1 one horse hose carriage, 2 spare horses, 3,400 feet 2½-inch cotton hose, 2 two-way chucks, 2 lathes, 1 grindstone, tools, poles, shafts, 4 ladders, feed, salt, boiler and radiators, etc.

In Chief's office: 2 desks, set of draws, 1 table, 16 chairs, 2 beds and bedding, 1 silver and 2 brass trumpets, mirror, cloth, badges, buttons, 3 set dies for department buttons, 1 set dies for department badge, 1 large clock (Lawrence's patent), 1 small stop clock, chamois skins, dusters, soap, brooms, brushes, 1 lantern, medicines, sponges, matches, axle grease, etc.

The value of all the foregoing property is \$130,000.00

General Running Orders.

The Companies will respond to alarms of fire given from boxes as indicated on running card.

The Chief, First Assistant and Protective Company, will answer alarms from all boxes.

When an alarm of fire is given, all companies not responding will remain at their houses thirty minutes, unless dismissed by telegraph signals.

One blow on the engine house gongs and alarm bells will be understood as proclaiming the fire extinguished, and the companies not attending dismissed.

Two strokes will constitute a general alarm, and all companies will report immediately, after waiting thirty seconds to be sure it is not an alarm from another box.

After the first alarm is given and before the recall signal is struck, should an alarm be given from another box, all unemployed companies will respond.

This article will apply to all alarms until the dismissal is struck.

Two strokes repeated three times at 1-4 before 8 A. M., and 1-4 past 1 P. M. in summer, and 1-4 before 8 A. M., and 1-4 before 1 and at 6.30 P. M. in winter, denotes no session of schools.

The bells will be struck once at 1 and 8.30 P. M.

Instructions to Key-Holders.

Alarms are to be given from the box nearest location of the fire.

Upon the discovery or positive information of a fire, you will unlock the box, pull down the slide or hook once only, and let go.

If you hear no sound from the bell, pull again; if you fail the second time, go to the next nearest box and do the same. Also, be particular to remain at the box until the arrival of an Engineer, who will release the key.

Each box contains a small bell, which if heard before you pull the hook, indicates that the alarm has been given from another box. In such cases do not pull the hook until you are sure the alarm has been completed.

Never signal for a fire seen at a distance. Never touch the hook except to give an alarm of fire. Give an alarm for no cause than an actual fire.

Second alarms for the same fire will be given only by one of the Engineers.

Never let the key go out of your possession, unless called for by the Chief Engineer. If you change your place of business or residence where the key is kept, return it to the same officer.

Keys to the boxes are in the possession of responsible parties in the vicinity of the boxes; also in the hands of the police.

Citizens are requested to inform themselves where the keys of the signal boxes are kept. A large number of boxes have been furnished with a key in an iron box with glass front, which in a few cases had to be taken off on account of the boys breaking the glass so often.

COMPANIES RESPONDING TO TELEPHONE ALARMS.

- DISTRICT No. 1—North side of Hale's Brook west of B. & L. R. R. to and including Westford Street, to City line. Hose 2 and 9, Truck 2, and Chemical C.
- DISTRICT No. 2—North of Westford Street, west of B. & L. R. R. to Pawtucket Canal, to Merrimack River. Hose 2 and 8, Truck 2, and Chemical C.
- DISTRICT No. 3—North side of Pawtucket Canal, Fletcher Street to Merrimack River, Pawtucketville included. Hose 7 and 8, Truck 2, and Chemical B.
- DISTRICT No. 4—East side Fletcher Street commencing at Suffolk Street, through Suffolk, to Merrimack River, including Little Canada. Hose 7 and 8, Truck 3, and Chemical B.
- DISTRICT No. 5—East side of Suffolk Street, west of B. & L. R. R. through Dutton Street, to Merrimack River. Hose 3 and 8, Truck 3, and Chemical B.
- DISTRICT No. 6—Centralville. Hose 3 and 5, Truck 1, and Chemical B.
- DISTRICT No. 7—Belvidere. Hose 4 and 6, Truck 1, and Chemical B.
- DISTRICT No. 8—East side Dutton Street and B. & L. R. R., to the Canal, to Concord River. Hose 3 and 6, Truck 3, and Chemical B.
- DISTRICT No. 9—South side of Canal, through Central Street to Elm, to South, to Jackson Street. Hose 3 and 6, Truck 3, and Chemical B.
- DISTRICT No. 10—Warren Street to, but not including Central Street, to Wamesit, to Rogers, to Concord River. Hose 4 and 6, Truck 3, and Chemical B.

DISTRICT No. 11—West side but not including South Street, to Highland, to B. & L. R. R. Hose 2 and 6, Truck 2, and Chemical B.

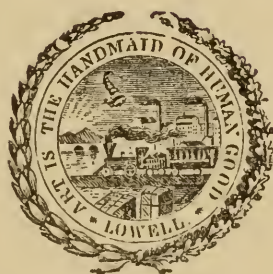
DISTRICT No. 12—South side but including Highland, Elm, Wamesit and Rogers Street to Concord River, east of B. & L. R. R., to City line. Hose 1 and 6, Chemical C, Truck 2 (except Lawrence Street from Rogers to Hapgood's Mattress Works.)

DISTRICT No. 13—South side of Hale's Brook, west of B. & L. R. R., to City line. Hose 1 and 9, Truck 2, and Chemical C.

Truck 3 will respond to alarms on Lawrence Street from Rogers Street to Hapgood's Mattress Works.

The Protective Company will respond to all alarms.

ANNUAL REPORT
OF THE
SUPERINTENDENT OF STREET LIGHTS
OF THE
CITY OF LOWELL,
FOR THE YEAR 1891.



LOWELL:
DAILY NEWS JOB PRINT, HILDRETH BUILDING,
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN Jan. 19, 1892,

Received and ordered on file.

MICHAEL J. DOWD *City Clerk.*

REPORT.

LOWELL, January 1, 1892.

To the Mayor and Board of Aldermen :

GENTLEMEN :— Herein is submitted the Annual Report of the Superintendent of Street Lamps, for the year ending December 31, 1891. The working force under the direction of the Superintendent (Chief of Fire Department), consists of eleven men, one of which acts as foreman. They have in addition to their regular duties of lighting and cleaning the gas lamps, set and fitted up thirty-four gas and forty gasoline posts, the past year.

There are at present 912 gas lights; in addition there are 39 lights owned and maintained by the different corporations, the city paying for the gas consumed. These lights are lighted and put out according to the time designated by a card issued by the Superintendent monthly. These lights average about seven hours per night and burn 4, 6, 12 and 18 feet per hour, according to location.

The locations of the gas lights added the past year are as follows: Hanover Avenue, four; Parkview Avenue, three; Arch, Cedar, Washington, West Ninth and East Merrimack Streets two each, Mammoth Road Rockdale Avenue, Crane Avenue, Belmont Avenue, Simpson Place, Hanks, Kinsman, Nesmith, Pleasant, Varney, Grove, Highland, Arlington, West Fourth, New "A" and Hampshire Streets, one each.

The Globe Gas Light Company, of Boston, agree by contract to furnish all lanterns and glass, and keep and maintain their lights in good order, with a light equal to a five-foot burner, at six cents a light per night, they to have no less than twenty-five nights per month, and to burn until one o'clock. These lights as a rule, are located on streets where there are no gas mains and are replaced with gas as soon as the mains are laid in the streets.

There are 456 Gasoline lights at present, 40 new ones have been added and 17 have been replaced by gas lights the past year. The new ones are located as follows:—Hanover Avenue, six; Quebec street, five; Cosgrove street, four; Parkview Avenue, three; Middlesex Road, Bowden, Range, Christian and "B" streets, two each; Decatur Avenue, London, Bachman, Washington, East Merrimack, Maple, "A," Auburn, Lincoln, and New streets and Dudley Court, one each.

The number of Electric Lights at the beginning of the year, was 179; twenty-five more were located but

not put in until this year; thirteen more were located; making a total of thirty-eight added this year. There are at present 217 lights; five more were located, but have not yet been put in. The city pays the Electric Light Company forty cents per light for two hundred lights; all over that number thirty-seven and one-half cents per light, all and every night in the year. The lights put in the past year are located as follows:—

Three on Broadway (one at the corner of Rolfe, one at the corner of Wilder and one at the corner of Fletcher street); three on Gorham street (one near the Court House, one at the corner of Olive street, and one at the corner of Moore street); four on Moore street (one at the corner of Bleachery, one at the corner of Andrews, one at the corner of Agawam and one near the church); three on Chelmsford street (one opposite Mr. Ward's, one at the corner of Dailey street and one at the junction of Hale street); three on Middlesex street (two between Mr. Francis Jewett's residence and Pawtucket street, and one at the corner of Pawtucket street); two on Smith street (one opposite the Shaw Hosiery and one at the corner of Liberty street); two on Westford street (one at the corner of South Canton street and one at the corner of Wilder street); one each at the corners of School and West Bowers, Pine and Liberty, Liberty and School, Concord and Sherman, Andover street and Hanover Avenue, Grove and Dover, Chestnut and Fayette, Merrimack and Palmer, Robbins

and Pine, and opposite stable on West Third street (near Park on Third street), at Bartlett School House, Pumping Station, Warren street opposite Middlesex Mills, Pawtucket street near R. R. crossing, Appleton street near Pearl street, Thorndike opposite Hale, and at Police Station, Market street. Eight lights were running on Fort Hill Park during the months of July, August and September.

The whole number of lights up to date are:

Electric.....	217
Gas	912
Gasoline	456
	<hr/>
	1585

The following statement will show the Receipts and Expenditures:

RECEIPTS.

Appropriation	\$25,000 00	
Received from other sources.....	13 36	
Transfer.....	863 14	
	<hr/>	\$55,876 50
		<hr/>

EXPENDITURES.

Pay Roll.....	\$7,007 75	
Electric Light Company.		
Streets.....	\$28,698 60	
Huntington Hall....	502 50	
City Government Build'g	223 96	
	<hr/>	29,425 06
Gas Light Company,		
Streets.....	\$8 251 18	
	<hr/>	
<i>Amounts carried forward...</i>	\$8,251 18	\$36,432 81

<i>Amounts brought forward</i>	\$8,251 18	\$36,432 81
Huntington and Jackson		
Halls	487 71	
City Government Build'g	561 77	
Armories	21 23	
Ward Rooms	39 56	
Dep't Headquarters	6 77	
	<hr/>	9,368 22
Globe Gas Light Co		8,251 62
Hay, Grain Waste, Glass, Paint, Lanterns,		
Frames, Water Works, Posts, etc	1 823 85	
	<hr/>	\$55,876 50

Schedule of property belonging to the city, under the charge of the Superintendent of Street Lamps, Jan. 1, 1892:

Nine hundred and twelve street lights and 193 lamp posts piped and capped ready for use, decapitated on account of electric lights, 456 wooden posts and frames used for gasoline purposes, 1 horse, 2 wagons, 2 robes, 2 blankets, 2 sleighs, 3 harnesses, 30 lanterns, 10 ladders, 3 hammers, 5 frames, 1 air pump, 1 Johnson pump, 2 saws, 1 duster, 2 oil cans, 12 globes, 1 sixty-gallon oil tank, 1 match box, 1 stove, 1 boiler connection, 1 Colcord desk, 1 table, 1 spittoon, 1 coal hod, 5 shovels, 4 picks, 2 bars, 2 tamps, 3 monkey wrenches, 2 boxes of glass, 40 feet of 3-4 inch hose, 1, 1-8, 1-2, and 3-4 inch dies, 3 pipe cutters and necessary pipe fittings, 800 feet 3-4 inch pipe, 2 pairs 3-4 inch pipe tongs, 1 pair 1 inch pipe tongs, 1 diamond glass cutter,

1 ton of coal, 2 lanterns, 5 Bray burners, 1 spirit level, 15 torches, 1 bench, 1 vise, 20 gallons of alcohol, 1 fork, 8 wooden posts, and 2 doz. pipe fittings, etc.

The value of the above property is about \$25,000.00.

Respectfully submitted,

EDWARD S. HOSMER,

Superintendent.

ANNUAL REPORT
OF THE
SUPERINTENDENT OF PUBLIC BUILDINGS
OF THE
CITY OF LOWELL,
FOR THE YEAR 1891.



LOWELL, MASS.:
CAMPBELL & HANSCOM, PRINTERS.
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, April 5, 1892.

Read and ordered on file. Sent down for concurrence.

MICHAEL J. DOWD, *City Clerk*.

IN COMMON COUNCIL, April 5, 1892.

Read and ordered on file in concurrence.

DAVID CHASE, *Clerk*.

REPORT.

OFFICE OF SUPERINTENDENT OF PUBLIC BUILDINGS. }
LOWELL, MARCH 25, 1892. }

*To His Honor the Mayor, and Gentlemen of the City
Council:*

In compliance with the requirements of the City Ordinances, I respectfully submit the following report of the department under my charge for the year 1891.

I assumed charge of the department April 27th. The retiring superintendent, neglecting to show me around through the department, I was obliged to obtain my information of the workings of the department from my foreman, Mr. Foley, and clerk of department, Mr. Kidder.

The contracts for the extension of the pumping station had been let when I assumed charge, and since then there has been built a work shop, stable and cart shed for the water works department, that department paying for the same from their appropriation, and the buildings being built under my supervision.

There has also been built an addition to the police stable at a cost of \$1,000.00; at the police station the old closets against the wall for use of the officers, have been removed and new ones put in, making an addition

of twenty-seven closets. The building has been painted and whitened throughout. Steamer No. 4 house has been painted throughout, also Hose No. 9 house. The Protective house has been painted and new floors for the stalls. Hose No. 5 house has been painted and new floor beams put in over the manure cellar, as there was no ventilation for the manure cellar and the beams had rotted out for that reason.

At Hope No. 1 engine house new floors have been laid, and at Hose No. 8 house there has been a new boiler put in, as the old one was insufficient to warm the building and the new tower.

At our carpenter shop we have put in new machinery of all kinds, so as to be able to do our own work, and in as thorough a manner as can be done anywhere; and I feel that we have got as good, if not the best, equipped shop for city work as there is in the state.

There has been a new floor laid at Huntington hall, which was very much needed, and has made a wonderful improvement.

NEW ENGINE HOUSES.

A loan having been made for the erection and furnishing of engine houses in Pawtucketville and on Lawrence street, bids were called for the construction of both houses. The one in Pawtucketville is nearly completed, and the one on Lawrence street has the foundation in only. I think poor judgment was used by the committee of three years ago in selecting the lot on Lawrence street, as the foundation has had to be blasted out of solid ledge, thus causing a large expense for putting the foundation in.

The contracts are awarded for the erection of the rest of the building, and work will be commenced on it by the middle of April.

SCHOOL HOUSES.

I think there have been more repairs made on the school buildings the last year than has been done for several years, yet there is a chance to spend quite a sum of money judiciously on them, to put them in proper repair.

The Butler school has been whitened throughout. The Pawtucketville school has been whitened and painted. The Training school whitened. West Sixth Street school whitened. also the school room in the engine house on Fourth street. I think this room should be abolished, and a new primary school built in that locality, as I consider it unfit to be used for such a purpose.

The Elliot school has been painted. The Green school has had new plumbing, and the roofs have been re-slatted and new tin roof.

The Highland school has been painted throughout. The Cheever Street school has been shingled. Fayette Street school has had new plumbing and the basement ventilated.

The Bartlett school has had new plumbing. The Colburn school has had new floors laid. School Street school has had the basement ventilated.

The Worthen Street school has had the steam plant remodeled, and the building painted outside. Morrill school painted outside and has been replumbed.

The Powell Street school has also been replumbed. The Lyon Street school has been painted outside, and

the basement, which is used for a ward room, has had a new floor laid.

The school committee asking for more room in the vicinity of the London Street school, a lot of land was hired on that street and the house from Rock street moved to that lot, the Rock Street school not having been used since the completion of the Cross Street school.

The Edson school boiler being insufficient to heat the building properly, it has been replaced by a larger one, which is working very satisfactorily. A new boiler has also been put in the Mann school.

The building of a High school on the old site necessitated the finding of new quarters to accommodate the High school scholars, until the completion of the new building; and for that purpose the Mann school was taken and an addition was built to it, with a passage way to connect both buildings; this being for temporary use, answers the purpose very well.

NEW SCHOOL HOUSES.

The committee on education voting to locate the new High school on the old lot, plans were prepared for said building and additional land bought adjoining. Bids were called for the foundation of same, which has been awarded, and is nearly finished.

A loan of \$60,000 was authorized by the city council for the buying of land and construction of a twelve-room school house to take the place of the Moody school. The land has been purchased at the corner of High and Rogers streets, and the foundation is all in, and the plans

are now being figured for the construction of the rest of the building.

NEEDED IMPROVEMENTS.

The Kirk Street school should have its basement ventilated. The Green school needs new ceilings.

The Pawtucket school needs new floors in first story.

The Colburn school needs to be re-slatted. At the Training school the boiler is not large enough and should be replaced by a larger one. The Edson school needs to be whitened throughout, also to be re-slatted.

At Pond street the urinals need to be ventilated.

I would most earnestly recommend that all four-room school buildings heated by stoves be replaced by steam, as the teachers complain that in order to heat the rear of the rooms, they are obliged to move the children that sit near the stoves.

I submit herewith a table of receipts and expenditures on the old and new buildings:

SCHOOL HOUSES.

Appropriation	\$25,000.00	
Loan	19,000.00	
Transfer from reserve fund.....	601.03	
Janitors' pay rolls.....		\$17,211.71
Temporary High school.....		7,189.64
Expended on old buildings.....		20,199.68
	<u>\$44,601.03</u>	<u>\$44,601.03</u>

NEW HIGH SCHOOL.

Loan	\$150,000.00	
G. H. Pillsbury, for land.....		\$18,000.00
L. T. Montferrand, for land.....		13,500.00
Arbitrators.		300.00
Removing old building.....		1,945.13
Part payment on foundation.....		4,101.36
Sundries		1,021.16
Balance Jan. 1st.....		111,132.35
	<u>\$150,000.00</u>	<u>\$150,000.00</u>

NEW MOODY SCHOOL.

Loan	\$60,000.00	
Smith and Shedd, for land.....		\$17,929.10
F. W. Stickney, architect.....		500.00
P. O'Hearn, for foundation.....		3,510.60
Sundries		195.02
Balance Jan. 1st, 1892.....		37,865.28
	<u>\$60,000.00</u>	<u>\$60,000.00</u>

PUBLIC BUILDINGS.

Appropriation.....	\$15,000.00	
Addition to police stable.....		\$1,000.00
Salary of superintendent.....		1,500.00
Office and committee expenses.....		1,423.92
Expended on old buildings.....		8,138.28
Expended on account of Fourth of July celebration		98.74
Horses and carriages (board and repair of wagons).....		1,176.74
Expended on account of new armory..		147.41
Bills receivable.....		798.00
Balance Jan. 1st, 1892.....		716.92
	<u>\$15,000.00</u>	<u>\$15,000.00</u>

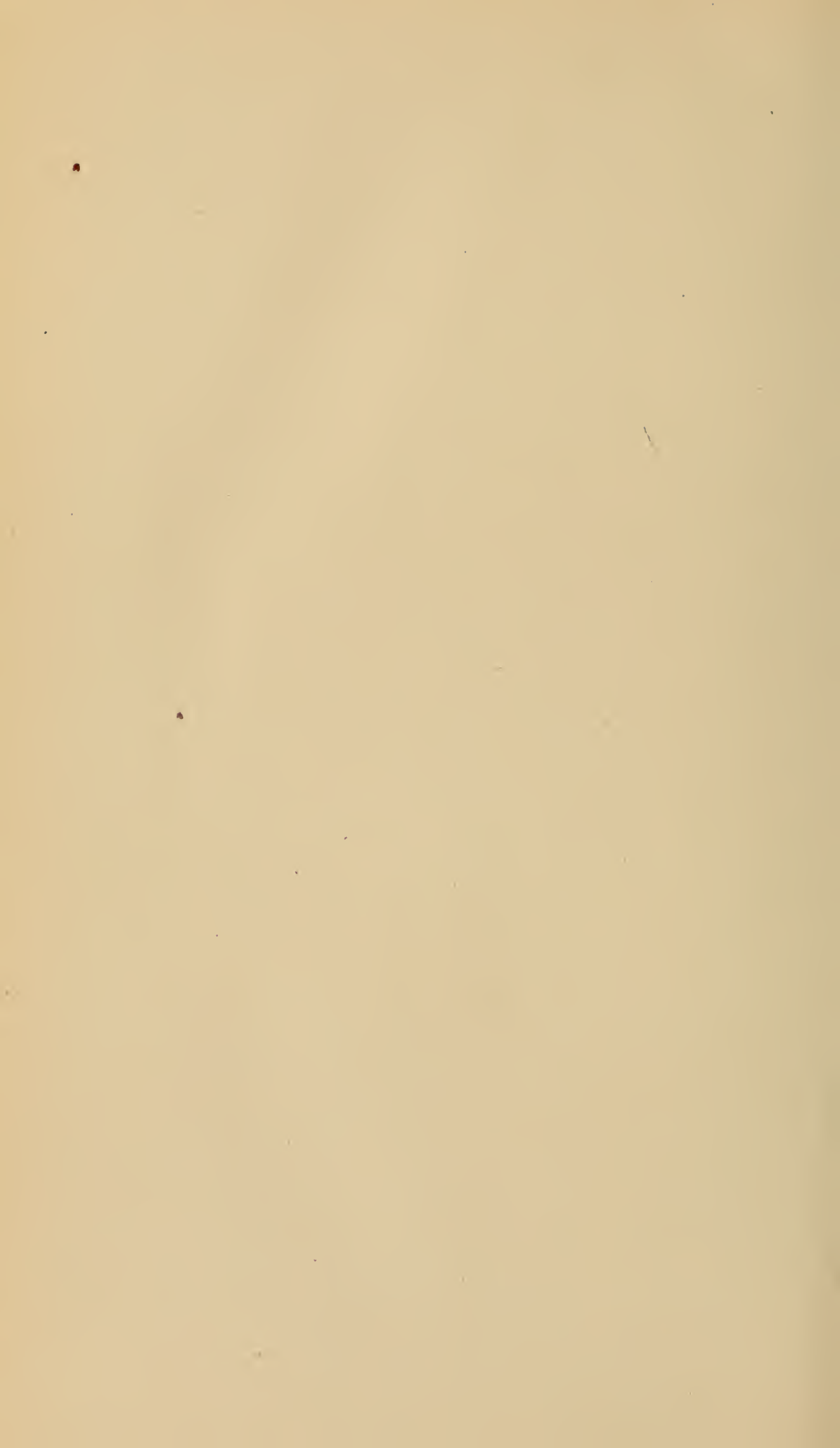
NEW ENGINE HOUSES.

Loan.....	\$30,000.00	
Expended on Pawtucketville engine house.....		\$6,843.39
Expended on Lawrence Street engine house.....		3,025.94
Balance Jan. 1st, 1892.....		20,130.67
	<u>\$30,000.00</u>	<u>\$30,000.00</u>

Respectfully submitted,

RICHARD BRAY,

Superintendent Public Buildings.



ANNUAL REPORT
OF THE
POLICE DEPARTMENT,
OF THE
CITY OF LOWELL,
FOR THE YEAR 1891.



LOWELL:
DAILY NEWS JOB PRINT, HILDRETH BUILDING,
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, December 15, 1891.

Received and Ordered on file. Sent down for Concurrence.

MICHAEL J. DOWD, *City Clerk*.

IN COMMON COUNCIL, December 22, 1891.

Received and ordered on file, in concurrence.

DAVID CHASE, *Clerk*.

REPORT.

*To the Honorable the Mayor and City Council of
the City of Lowell:*

GENTLEMEN,—I have the honor to submit this my Annual Report of the Police Department of the City of Lowell, for the year ending November 30, 1891:

There are at present seventy-five officers in the regular force and nine officers in the reserve force.

ROSTER OF THE FORCE.

CHIEF OF POLICE.

CHARLES HOWARD.

DEPUTIES.

JAMES A. MCQUADE.

GEORGE R. DAVIS.

INSPECTORS.

FRANK GOODWIN.

DANIEL M. HAYES.

CHARLES LAFLAMME.

GEORGE B. PALMER.

SERGEANTS.

JAMES DUNLAVY.

WILLIAM R. KEW.

JAMES E. WEBSTER.

WARRANT AND COURT OFFICERS.

JACOB G. FAVOR.

PETER CAWLEY.

ISAAC L. LIBBY.

KEEPERS.

JOHN R. MACKENZIE.

JAMES McLAUGHLIN.

DAY PATROL.

ELOI N. BREAUT,

DANIEL W. LANE,

WILLIAM G. BUMPS,

ALBERT E. LIBBY,

CORNELIUS E. COLLINS,

ALONZO J. PAGE,

JOHN B. CROWLEY,

NAPOLEON PROVENCHER,

HENRY FARRINGTON,

CHESTER E. RYDER,

CHARLES GREGG,

THOMAS J. SANBORN,

ENOCH N. GRINNELL,

JOHN A. WALSH,

REDMOND WELCH.

NIGHT PATROL.

THOMAS E. ALLEN,

PATRICK FITZPATRICK,

EDGAR L. BILLS,

EDWARD FOX,

JOSIAH S. BLOOD,

JOHN C. FURLONG,

JAMES BOYLE,

JOHN F. GALLIVAN,

PATRICK H. BRADY,

WILLIS L. GARDNER,

JAMES BROSNAN,

DAVID H. GOODHUE,

HORACE W. CLEMENT,

WILLIAM H. GRADY,

MARTIN CONNORS,

JOHN HICKSON,

PETER T. CORCORAN,

JAMES E. HOLLAND,

JOHN CREAHIN,

ALFRED M. HOLMAN,

JOHN J. CROWLEY,

CORNELIUS HOWARD,

JOHN S. DENNETT,

JOHN D. HUBIN,

HUGH DOWNEY,

THOMAS INGALLS,

JOHN M. DUNFEY,

LINDSAY INGALLS,

WILLIAM B. JONES,

WILLIAM H. O'BRIEN,

MICHAEL J. LENNON,

JOHN O'CONNELL,

GEORGE W. MARSHALL,

PETER F. O'DONNELL,

CORMACK McINTEE,

HENRY F. QUINN,

JOHN H. MCKAY,

JAMES McNABB,

WILLIAM B. MOFFATT,

JAMES RILEY,

HERMON N. TILTON,

JOHN T. WHITTAKER,

FRANK H. WHITNEY.

RESERVE FORCE.

JOHN BUCHANAN,

JAMES E. DOW,

ALEXANDER DUNCAN,

FRANK FOX,

JOHN W. FOX,

MICHAEL J. KEEFE,

JOHN L. LEIGHTON,

FRANCIS E. MOORE,

ROBERT W. STOWELL.

DETAILED FOR SPECIAL DUTY.

DAVID J. DONALDSON,

MICHAEL E. McDONALD.

DRIVERS OF PATROL WAGON.

JAMES H. HOWARD,

JOHN W. TILTON.

HOSTLER.

JAMES W. KILBURN.

POLICE MATRON.

MARGARET WALLACE.

Changes in the Department from December 1,
1890, to November 30, 1891:

APPOINTMENTS.

May 5, ALEXANDER DUNCAN,

MICHAEL J. KEEFE,

JOHN W. FOX,

ORRIN M. ROLFE,

ROBERT W. STOWELL.

PROMOTIONS.

JAMES A. MCQUADE to be Deputy Chief.

RESIGNATIONS.

Aug. 28, ORRIN M. ROLFE.

MICHAEL J. BURNS was appointed by the Committee on
Police, April 13, 1891, as Electrician for the Police Signal
System.

DEATHS.

WILLIAM MCCARRON.

DISCIPLINE.

The discipline of the Department has been good with few exceptions, and the officers as a rule have shown a disposition to perform their duties faithfully. Only four officers have been brought before the Committee to answer to charges of neglect of duty, one of whom was fined; the other three were suspended for a short time.

SUMMARY.

The following is a summary of the work of the Department for the year ending Nov. 30, 1891:

Whole number admitted for lodging	4827
Males.....	4758
Females.....	42
Americans	2476
Foreigners	2351
Minors.....	238
Non-Residents.....	4704
Colored.....	12
Whole number arrested.....	5357
Males.....	4397
Females.....	960
Americans	2332
Foreigners	3025
Minors	533
Non-Residents.....	840
Colored.....	4

CAUSES OF ARREST.

Adultery.....	16
Assault and Battery.....	229
Assault, Felonious.....	1

Assault on Officer.....	9
Arson	1
Bastardy.....	10
Breaking and Entering	26
Breaking Glass.....	5
Breaking Street Lamps.....	1
Bribery.....	1
Buying Junk of Minor.....	1
Capias for Default.....	17
Capias from Superior Court.....	7
Cruelty to Animals	9
Concealed Weapons, Carrying.....	1
Common Railer and Brawler.....	3
Collecting Junk without License.....	2
Common Nuisance.....	1
Common Night Walker....	2
Crime Against Nature.....	2
Drunkenness, Simple.....	3506
Drunkenness, 2d Offence	315
Drunkenness, 3l Offence.....	112
Drunkard, Common.....	102
Disturbing the Peace.....	52
Delirium Tremens.....	23
Discharging Firearms in City Limits.....	2
Disturbing Funeral Procession.....	2
Disturbing Religious Meeting.....	1
Embezzlement.....	15
Escaped Prisoner.....	17
Evading Car Fare.....	2
Employing Boy Under Twelve Years of Age.....	1
Evading U. S. Tax.....	2
Food Law, Violation of.....	6
Fornication	13
False Pretenses, Obtaining Money by.....	12
False Answers to Stable Keeper.....	3
Horse, Unlawfully Taking and Driving.....	11
Indecent Exposure of Person.....	6
Injuring Personal Property.....	1
Insane.....	18
Keeping House of Ill Fame	4

Keeping Disorderly House.....	1
Keeping Veal Unlawfully.....	1
Keeping a Stable without License.....	4
Keeping Hotel without License.....	1
Keeping Unlicensed Dog	2
Larceny	250
Larceny from the Person.....	7
Larceny from a Building	3
Lewd and Lascivious.....	2
Libel	1
Liquor, Unlawfully Keeping.....	97
Liquor Nuisance.....	36
Liquor, Unlawful Sale.....	7
Liquor Seizures.....	109
Lord's Day, Violation of.....	9
Lord's Day, Playing Game on.....	1
Mortgaged Property, Conveying.....	9
Mortgaged Property, Concealing.....	4
Malicious Mischief.....	11
Murder, Suspicion of.....	1
Murder, Attempt.....	2
Neglect of Family.....	42
Neglect of Child by Parent.....	1
Obstructing Streets.....	18
Profanity	14
Promoting a Lottery.....	6
Peddling without License.....	3
Receiving Stolen Goods.....	3
Robbery	2
Stubborn Children	30
Suspicious Persons.....	64
Safe Keeping.....	8
Surrendered by Bondsman.....	1
Threatening Language.....	12
Trespass, Wilful.....	7
Truancy	33
Unlawfully Keeping Intelligence Office.....	3
Unlawful Sale of Poison.....	2
Unlawfully Removing Baggage.....	9
Unlawfully Compounding Drugs.....	1

Unlawful Fishing.....	1
Vagrancy	13
Violation of Milk Law.....	11
Violation of Health Law.....	4
Violation of Game Law.....	1
Violation of U. S. Pension Law.....	1
Wandering About Streets.....	42

PROSECUTIONS.

Adultery	16
Assault and Battery.....	217
Assault, Felonious.	1
Assault on Officer.....	9
Arson	1
Bastardy.....	9
Breaking and Entering.....	24
Breaking Glass.....	5
Breaking Street Lamps.....	1
Buying Junk of Minor	1
Bribery.....	1
Capias for Default.....	16
Cruelty to Animals.....	9
Common Railer and Brawler.....	3
Collecting Junk without a License.....	2
Common Nuisance.....	1
Common Night Walker.....	2
Crime Against Nature.....	2
Concealed Weapons, Carrying.....	1
Drunkenness, Simple.....	1909
Drunkenness, 2d Offence.....	311
Drunkenness, 3d Offence.....	112
Drunkard, Common.....	102
Discharging Firearms in City Limits.....	1
Disturbing Funeral Procession	2
Disturbing Religious Meeting	1
Disturbing the Peace.....	43
Embezzlement.....	15
Employing Boy Under Twelve Years of Age.....	1

Escaped Prisoner.....	3
Evading Car Fare.....	2
Food Law, Violation of.....	6
Fornication	13
False Pretenses, Obtaining Money by.....	11
False Answers to Stable Keeper.....	3
Horse, Unlawfully Taking and Driving... ..	11
Indecent Exposure of Person.....	6
Injuring Personal Property.....	1
Insane.....	1
Keeping House of Ill Fame.....	4
Keeping Unlicensed Dog.....	2
Keeping Hotel without a License.....	1
Keeping a Stable without License	4
Keeping Disorderly House.....	1
Keeping Veal Unlawfully.....	1
Larceny	229
Larceny from the Person... ..	4
Larceny from a Building.....	3
Libel	1
Liquor, Unlawfully Keeping.....	97
Liquor Nuisance.....	36
Liquor, Unlawful Sale.....	6
Lord's Day, Violation of.....	9
Lord's Day, Playing Game on.....	1
Mortgaged Property, Conveying.....	9
Mortgaged Property, Concealing.....	4
Mulicious Mischief	10
Murder, Attempt.....	2
Neglect of Child by Parent	1
Neglect of Family	42
Obstructing Streets.....	16
Peddling without License.....	3
Profanity	14
Promoting a Lottery.....	6
Receiving Stolen Goods.....	3
Surrendered by Bondsman.....	1
Stubborn Children.....	29
Threatening Language.....	12
Trespass, Wilful.....	4

Truancy	33
Unlawfully Removing Baggage.....	7
Unlawful Sale of Poisons.....	2
Unlawfully Keeping Intelligence Office.....	3
Unlawfully Compounding Drugs.....	1
Vagrancy	12
Violation of Game Law.....	1
Violation of Health Law....	4
Violation of Milk Law	11
Wandering About Streets.....	40
Number found Not Guilty by Court.....	80

FOR THE FOLLOWING OFFENSES:

Assault and Battery.....	23
Breaking Glass.....	1
Cruelty to Horse.....	1
Common Drunkard.....	1
Concealing Mortgaged Property.....	2
Disturbing the Peace.....	3
Driving Off a Horse.....	1
Embezzlement.....	2
Exposure of Person.....	1
False Pretences.....	3
Injuring Personal Property	1
Keeping Stable without a License	3
Keeping Liquor.....	3
Larceny	20
Liquor Nuisance.....	2
Neglect of Family.....	3
Obstructing a Street.....	1
Promoting a Lottery.....	1
Removing Baggage.....	1
Sale of Liquor.....	1
Threatening Language	3
Unlawfully Keeping Intelligence Office.....	3
Unlawfully Compounding Drugs.....	1
Number of City Ordinance Cases.....	95

FOR THE FOLLOWING OFFENCES:

Truancy	33
Wandering About Streets.....	42
Obstructing Street.....	18
Discharging Firearms Within City Limits.....	2

MISCELLANEOUS REPORTS.

Assisted Home Drunk	185
Disturbances Quelled Without Arrest	147
Lost Children Returned to Parents	80
Stray Teams Put Up	80
Store Doors Found Open	376
Defective Streets and Sidewalks	298
Defective Lamps and Burners	2254
Obstructions Removed from Streets	101
Number of Wagon Calls	3881
Number of Arrests by Wagon	4779
Amount of Money taken from and returned to persons arrested	\$9,926 02

FINANCIAL STATEMENT.

Balance Jan. 1, 1891	<u> </u>
Appropriation	\$70,000 00
Received	21,970 34
Total	<u>\$91 970 34</u>
Expenditures	90,392 78
Balance	<u>\$1,577 56</u>

The past year has been an active one for the members of the Police Department, as may be inferred from the large number of arrests and prosecutions. Most of the arrests and prosecutions have been for minor offences.

Notwithstanding the many barriers thrown in the way of the police, an honest effort has been made to enforce the law and bring the offenders to the bar of justice.

Neither time or distance has prevented the pursuit of criminals, several having been overtaken and brought back from other cities and states and punished for their offences.

DETECTIVE DEPARTMENT.

The work of this department has been conducted by Inspectors Hayes and Laflamme with that skill and energy for which they have become noted. Working night as well as day, when it was required, they have rendered valuable services, and I am convinced that this department is in the hands of good officers.

LIQUOR PROSECUTIONS,

The duty of properly enforcing the various provisions of law regulating the keeping and sale of intoxicating liquors is one of considerable difficulty.

Inspectors Goodwin and Palmer, and Patrolman Donaldson, who have been assigned to this duty, have served 191 search warrants and made 109 seizures, netting 2169 gallons of liquors. There have been 140 prosecutions made in the Police Court. The fines in these cases amounted to \$12,345.

THE POLICE SIGNAL SYSTEM.

The efficiency of the department has been greatly aided by the Gamewell Police Telephone and Signal System. There are fifty-one street signal boxes, and a complete central office plant at the police station, together with connections to the police stable and patrol wagon. The apparatus is substantially made, and has already proved of great service to the department, and has thus far fulfilled all that was promised on its behalf.

The large territory which the Patrolmen are obliged to cover will render it desirable to have additional street signal boxes.

The number of wagon calls for the year was 3881. The number of prisoners taken to the station in the patrol wagon was 4779.

CONCLUSION.

The peace and good order of the city has been generally maintained, and no serious outbreaks or disturbances, other than drunkenness, which has increased, which in my opinion is due to the new drunk law that went into effect July 1, 1891.

I desire to acknowledge my obligations to Deputies George R. Davis and James A. McQuade for all their efforts for the success of the department.

OBITUARY.

William McCarron,

DIED NOVEMBER 29, 1891.

He was born in Ireland, July 25, 1844. He was appointed a member of the Police Department December 16, 1884. He was an intelligent and efficient officer, popular with the general public, and loved and respected by the members of the force. In him the department lost one of its useful members.

To his Honor Mayor Fifield, and to Aldermen Crowley, Allen and Puffer, I am under many obligations for the prompt and hearty support they have given me.

I also extend my thanks to Hon. Samuel P. Hadley, Justice, and to James F. Savage and Edward W. Trull, respectively, of the Police Court, for valuable counsel and their uniform courtesy in dealing with the department.

Respectfully submitted,

CHARLES HOWARD,

Chief of Police.

ANNUAL REPORT

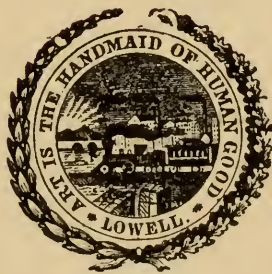
OF THE

TRUSTEES

OF THE

City Library of Lowell,

FOR THE YEAR 1891.



LOWELL:
DAILY NEWS JOB PRINT, HILDRETH BUILDING,
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, Jan. 19, 1892.

Received and ordered on file. Sent down for concurrence.

MICHAEL J. DOWD, City Clerk.

IN COMMON COUNCIL, Jan. 19, 1892.

Received and ordered on file, in concurrence.

DAVID CHASE, Clerk.

Administration of the City Library, 1891.

BOARD OF TRUSTEES.

GEORGE W. FIFIELD, Mayor of the City.

GEORGE F. RICHARDSON,	STEPHEN J. JOHNSON,
FRANK P. PUTNAM,	LARKIN T. TRULL,
THOMAS WALSH.	

LIBRARIAN.

FREDERICK A. CHASE.

ASSISTANT LIBRARIAN.

HARRIET F. HILL.

ASSISTANTS.

WALTER H. GILMAN,	STEPHEN T. WYMAN,
CLARA BEARD,	BERTHA G. KYLE,
MARION R. BROWN,	ALICE M. MYERS,
HARRY C. BOWEN,	ORVILLE C. BRUNELL.

SUPERINTENDENT OF READING-ROOM.

EDWARD F. SLATTERY.

JANITOR.

WILLIAM R. MYERS.

REPORT OF THE TRUSTEES.

LOWELL, Dec. 31, 1891.

To the City Council of the City of Lowell :

The year 1891, the year of the fire, has been a memorable one in the history of the Library.

Though to one now entering the Library there is little to remind him of the fire, a close examination of its shelves will show abundant evidence of it, and it will be many years before all trace of the damage done will have disappeared.

The story of the fire is well-known and need not be told within the narrow limits of this report. We all remember the feelings with which, on the afternoon of the fifth of April, we heard that the Library had been well-nigh ruined. No better evidence of the value to a city of a public library could have been given than the expressions of regret which were heard on all sides. The loss of the Library meant to many the loss of their most enjoyable means of entertainment. To many others it meant the loss of a great source of information and education, and of so much that went to ennoble their lives. The extent of the deprivation to the public by the loss of the Library, may be judged

by the fact that the circulation of books on the day before the fire was eight hundred and four.

Further evidence of the Library's value has recently been given in the interest which the public has shown in seeing the Library come out of the water and mould, lime and dirt, which once covered it, and again open its doors to the people.

Fortunately for the city, the Library has for several years carried an insurance, the annual premium on which has been paid out of each year's appropriation to the Library for Library purposes.

As soon after the fire as possible the extent of the damage done was ascertained. The insurance companies settling for the loss by paying the City Treasurer \$13,500 and giving the salvage from the fire to the Library.

The expedients adopted to reclaim the damaged books, and the labors of the assistants of the Library to this end have all been duly recorded in the local papers. Statistics elsewhere will give some idea of the amount of work which has been done on the books and on the catalogue before the Library could be re-opened.

Though the actual loss of books by fire does not appear to have been extensive, the damage done by water as represented by the books dried, pressed, rebound and repaired is very large.

And it must not be forgotten in estimating the present condition of the Library that, although all but a few hundred of the books are now on the shelves

which were there before the fire, yet many volumes are in a damaged condition, and that the \$13,500 paid by the insurance companies represents the damage done. This entire sum would have to be expended for replacements to bring the Library up to the standard which a city of Lowell's wealth and importance should keep. A consequence of the condition of the books will be that each year's list of worn out books will be much larger than heretofore; and correspondingly a greater proportion of each year's appropriation will have to be used for replacements, leaving less for the purchase of new books than formerly, unless additional appropriation is made to provide for them.

The Library now has an unexpended balance of the insurance money amounting to about \$11,000. The reason for this balance is, that because of the confusion caused by the fire and great amount of work in consequence, there was little buying of books during the year 1891, until about October, when a careful examination into the needs of the different departments began.

A few only of the many different classes have been investigated. Much remains to be done in the year 1892, and the present administration intends to pursue the buying and replacing of books with the greatest care, believing in making the Library as useful as possible to the greatest number; believing also, that the Library may be made of inestimable value in furthering the industrial progress of the city, and in furnishing means of education to all its citizens.

In submitting this report, we believe that the misfortune which the Library sustained in its fire will dispose the City Government to adopt a liberal policy of encouragement toward it.

This explanation of the present condition of the Library is made with the hope that the City Government will not let the fact that the Library already has an unexpended balance affect the amount to be appropriated for books for the Library for the coming year; and with the hope, also, that if possible, this unexpended insurance money may be set aside or regarded separately, at least to be expended carefully and deliberately with the larger space and larger needs the new Library building.

At a meeting for organization of the Board of Trustees on the Second Monday of January, 1891, Hon. George F. Richardson was re-elected Vice-President, and Larkin T. Trull, Esq., was re-elected Clerk.

Owing to continued illness, the Librarian, Mr. Charles H. Burbank, presented his resignation to the Trustees, February 12th, and at a meeting of the Trustees held February 26th, his resignation was accepted and the following resolutions unanimously adopted:

"The Trustees of the Lowell Public Library in accepting the resignation of Mr. Burbank, desire to place upon the records of the Board their testimony to the fidelity and urbanity with which he has discharged the duties of the office, and their sincere regret

that his failing health has deprived the Trustees of his valuable assistance and hearty co-operation in advancing the best interests of the Library."

At a meeting of the Trustees held July 1, 1891, Mr. Frederick A. Chase was chosen to succeed Mr. Burbank as Librarian. Mr. Chase assumed his new duties July 6th.

Owing to the complete destruction of the Library's reading room in Edson Block, the Trustees rented rooms at the corner of Palmer and Merrimack Streets. These rooms though decidedly inadequate are conveniently situated, and will serve well enough until rooms in the new building are in readiness.

Many friends of the Library have presented it with volumes and have greatly aided in replacing the extensive losses of the Library in the department of magazines, for which the Trustees make grateful acknowledgement.

The following financial statement will show the amount and sources of the receipts for the Library and also the direction in which they were expended.

RECEIPTS.

Balance from 1890, \$955,85, transferred to other appropriations.	
Appropriation by City Council	\$12,000 00
Dog licenses	3,254 69
Fines	148 24
Sale of catalogues	26 20
Lost and damaged books	7 32
Non-resident subscribers	2 00
Other sources	7 05
Insurance on account of fire	13,500 00
	<hr/>
	\$28,945 50

EXPENDITURES.

Salaries	\$ 5,994 87
Rent and heating library and reading rooms . .	1,764 05
Lighting	829 31
Books	4,551 85
Periodicals 1892	972 72
Binding	1,544 15
Insurance	150 00
All other expenses	1,500 91
Balance	11,637 64
	<hr/>
	\$28,945 64

Respectfully submitted,

GEORGE W. FIFIELD,
 GEORGE F. RICHARDSON,
 STEPHEN J. JOHNSON,
 LARKIN T. TRULL,
 FRANK P. PUTNAM,
 THOMAS WALSH,

Trustees.

Condition of the Library.

[illegible]

Classified Contents of the Library.

General Works	-	-	3,736	Useful Arts	-	-	-	1,798
Periodicals	-	-	2,727	Fine Arts	-	-	-	1,470
Philosophy	-	-	820	General Literature	-	-	-	5,124
Theology	-	-	2,971	Fiction	-	-	-	8,093
Sociology	-	-	2,400	History, including Travel	-	-	-	
Philology	-	-	332	and Description	-	-	-	7,912
Natural Science	-	-	1,970	Biography	-	-	-	3,922
				Total number Volumes				43,275

Percentage of fiction to all other classes, 18.7

Classified List of Accessions, 1891.

General Works	-	-	19	Fine Arts	-	-	-	80
Periodicals	-	-	873	General Literature	-	-	-	701
Philosophy	-	-	28	Fiction	-	-	-	397
Sociology	-	-	169	History, including Travel	-	-	-	
Natural Science	-	-	130	and Description	-	-	-	216
Philology	-	-	16	Biography	-	-	-	153
Theology	-	-	124					
Useful Arts	-	-	68	Total accessions				2,974

List of Donors to the Library, 1891.

NAMES.	Pamphlets	Volumes
Amherst College	1	
Apprentices Library Co., Philadelphia	1	
Astor Library	1	
Baker, Walter & Co.		1
Bangor Public Library	1	
Bell Street Chapel, Providence		2
Booth, O. H.		1
Boston, City of		1
Boston Public Library		1
Boston Water Works		1
Bridgewater State Normal School		1
Brooklyn Library	2	
Buffalo Historical Society	1	
Buffalo Public Library	1	
Burbank, Charles H.	1	
Cambridge Public Library	1	
Carolin, W. T.		2
Cheney, John V.		1
Chicago Public Library	15	
Cincinnati Chamber of Commerce		2
Cincinnati Public Library	3	1
Citizen's Association of Boston	1	
Clark Institution for Deaf Mutes	1	
Cobden Club	1	
Connecticut Insurance Companies		1
Cook, Thomas, & Co.	2	1
Cornell University	1	
Cust, Robert N.		3
Dover Public Library	1	
Eddy, Mrs. M. B. G.		1
Electrical World	1	
Enoch Pratt Free Library, Baltimore	2	
Fall River Public Library	1	
<i>Carried forward</i>	39	20

NAMES.	Pamphlets	Volumes
<i>Brought forward</i>	39	20
Fitz Public Library, Chelsea	2	
Fletcher Free Library, Burlington, Vt.	2	
Gerry, Mrs. G. A.		20
Gilman, Alfred	1	2
Gorham Mfg. Co.		1
Gould, Mrs. Joseph		2
Graham, A. J.		1
Grand Rapids Board of Trade	1	
Green, Samuel A., M. D.	2	
Greenhalge, Hon. F. T.		1
Hamilton, Ontario, Public Library	1	
Hartford Library Association	4	
Harvard University	3	
Hawley, Goodrich & Co.	1	
Hoar, Hon. George F.	1	
Hobson, Charles H.	1	2
Home, Mme. Dunglas		1
Hopedale Public Library	1	
Indianapolis Public Library	2	
Jefferson, H. P., M. D.	1	
Lawrence, Mrs. Grace		21
Lawrence Public Library	2	
Lee, Francis H.	1	
Leue, Adolphe		1
Lynn Public Public Library	1	
Maimondes Library, N. Y.	8	
Malden Public Library	1	
Manchester City Library	1	
Manchester, Rev. L. C.	1	
Mason, Lewis D.	1	
Massachusetts Bureau of Education	2	
Massachusetts Society for the Prevention of Cruelty to Children	1	
Massachusetts State Agricultural Department	1	
Board of Health		2
Library	1	
Mercantile Library Association, San Francisco	1	
Michigan State Board of Health	2	1
Miller, Chester G.		1
<i>Carried forward</i>	86	76

NAMES.	Pamphlets	Volumes
<i>Brought forward</i>	86	76
Minneapolis Industrial Exposition	2	2
Minneapolis Public Library	3	
Newark Free Public Library	11	
New Bedford Board of Trade	1	
Newberry Library, Chicago	1	
Newburg Free Library	1	
Newburyport Public Library	1	
New Haven Free Public Library	3	
New Jersey State Library		2
Newton Board of Trade		1
Newton Free Library	1	
Nourse, B. F.	3	
Olin, Hon. William M.	2	2
Peirce, Hon. Henry B.		5
Perrin, Rev. W. T.	1	
Philadelphia Library Co.,	2	
Philadelphia Religious Society of Friends	1	
Philadelphia Times	1	
Pinkham, Geo. E., M. D.		13
Plimpton, A. B.		2
Porter, Edward G.	1	
Portland, Maine, Public Library	3	2
Portland, Oregon, Immigration Board	1	
Poughkeepsie Board of Education	1	
Pratt Institute, Brooklyn	3	
Pratt, Miss S. P.		4
Providence Public Library	1	
Richardson, Mrs. D. S.	2	
Royal Society of Canada		1
St. Louis Mercantile Library Association	1	
St. Louis Public Library	1	
Salem Public Library	2	
Scales, Miss Sarah E.		8
Schaeffer, Henri	2	
Silas Bronson Library, Waterbury, Conn.	2	
Slafter, Edwin F.	1	
Smith, Miss K. M.		12
Springfield City Library Association	8	
Standard Coal and Fuel Co.	1	
<i>Carried forward</i>	150	130

NAMES.	Pamphlets	Volumes
<i>Brought forward</i>	150	130
Stearns, George		1
Stevens, Hermon W.	1	
Swansea, Wales, Public Library	1	
Taunton Public Library	1	
Taylor, Frederick		30
Tewksbury Public Library	1	
Toledo Public Library	1	
Trinity Medical College, Toronto	1	
Tufts College	2	
United States Board of Agriculture	17	4
Department of Interior	30	17
Department of State	13	2
Fish Commission		3
Interstate Commerce Commission		1
Navy Department	1	
Smithsonian Institute	7	3
Treasury Department	1	2
War Department		20
University of Pennsylvania	1	
Wadlen, Horace G.	2	
Waite, Henry E.	1	
Waites, Alfred	1	
Warren County Library, Monmouth, Ill.	1	
Washingtonian Home	1	
Watertown Free Public Library	1	
Whittemore, Henry	1	
Wisconsin State Historical Society	1	
Woburn Public Library	1	
Wood, Horatio, Jr.		1
Worcester Free Public Library	1	
Worcester Polytechnic Institute	1	
Wright, Hon. Carroll D.	2	1
Total	242	215

Library open 180 days

Total Circulation	-	-	-	-	-	-	-	65,031
Average daily circulation	-	-	-	-	-	-	-	361
Largest monthly circulation (March)	-	-	-	-	-	-	-	10,889
Smallest monthly circulation (September)	-	-	-	-	-	-	-	5,945
Largest daily circulation (April 4)	-	-	-	-	-	-	-	855
Smallest daily circulation (September 3)	-	-	-	-	-	-	-	136
Percentage of Fiction read	-	-	-	-	-	-	-	.683
Percentage of other classes	-	-	-	-	-	-	-	.317

CIRCULATION IN REFERENCE DEPARTMENT.

MONTH.	General Works.	Periodicals.	Philosophy.	Theology.	Sociology.	Philology.	Natural Science.	Useful Arts.	Fine Arts.	Gen'l Literature.	History.	Biography.	Total
December		14	3	9	60	1	16	24	18	69	46	11	271
January		95	42	71	53	17	90	37	83	243	167	100	998
February	19	89	39	75	99	14	85	70	74	232	420	139	1355
March	22	108	18	55	52	14	48	88	107	296	316	115	1239
April		21	2	16	11		20	9		35	12	17	143
September		19	17	27	82	1	57	86	83	174	105	42	693
October		86	12	53	56	10	74	50	48	239	136	144	908
November		102	20	53	75	19	66	56	92	316	245	124	1168
December		107	8	16	33	9	64	59	58	248	85	146	833
Total	41	641	161	375	521	85	520	479	563	1852	1532	838	7608

MONTH.	General Works.	Periodicals.	Philosophy.	Theology.	Sociology.	Philology.	Natural Science.	Useful Arts.	Fine Arts.	Gen'l Literature.	History.	Biography.	Fiction.	Total.
December . . .		49	12	23	70	6	51	69	70	213	153	47	1892	2655
January		264	75	143	127	25	254	221	304	836	608	313	7053	10,223
February	20	274	60	154	181	23	254	259	271	660	910	302	6864	10,232
March	24	318	38	145	147	30	229	260	283	770	820	308	7517	10,889
April		61	5	27	22		48	38	23	100	83	43	1110	1560
September . . .	1	64	39	63	122	7	142	216	198	452	346	120	4175	5945
October		165	51	104	127	22	207	166	214	632	486	310	5637	8121
November . . .		252	70	103	135	37	197	212	251	715	686	347	5789	8794
December . . .		246	33	59	82	17	165	179	157	549	394	311	4420	6612
Total	45	1693	383	821	1013	167	1547	1620	1771	4927	4486	2101	44,457	65,031

ANNUAL REPORT
OF THE
CITY SOLICITOR,
OF THE
CITY OF LOWELL,
FOR THE YEAR 1891.



LOWELL, MASS.,
MORNING MAIL PRINT, NO. 147 CENTRAL STREET,
1892

CITY OF LOWELL.

IN BOARD OF ALDERMEN, March 1, 1892.

Received and ordered on file, sent down for concurrence.

MICHAEL J. DOWD, *City Clerk*.

IN COMMON COUNCIL, March 8, 1892.

Received and ordered on file, in concurrence.

DAVID CHASE, *Clerk*.

REPORT.

LOWELL, MASS., Feb. 29th, 1892.

To the City Council of Lowell :

GENTLEMEN — In compliance with my duties, I present for your consideration the annual report of the business done in this office, so far as concerns actions at law or in equity, brought in favor of or against the City :

CHARLES H. WHITNEY *vs.* CITY OF LOWELL.

By reference to the report of my predecessor, it will be seen that this case went to the Supreme Court on a question of law. The Supreme Court ordered a new trial, which was had at the March term of the Superior Court, before a jury, and a verdict was rendered for the defendant. The plaintiff took exceptions but they were not pressed.

ELIZA G. RANDALL *vs.* CITY OF LOWELL.

Action of tort brought to recover damages for injuries received by the plaintiff, who sprained and wrenched her ankle by reason of a defect in the concrete sidewalk on the southerly side of Middlesex Street. This case was tried before a jury at the March term of the Superior Court, and a verdict rendered for the defendant. Exceptions were taken by the plaintiff to the Supreme Court, which were heard and argued at the January sitting of the Court, but as yet no decision has been received.

DANIEL W. DARLING ET AL. *vs.* CITY OF LOWELL.

This was an action of contract brought by the plaintiffs to recover of the defendant damages for breach of contract. A Commission was appointed by the City Council to erect, build and finish a City Hall and Memorial Building, but were limited by resolution in the expenditure of moneys for the building of the City Hall to the sum of \$300,000. The Commission advertised for bids, and Darling Brothers, of Worcester, were among the bidders. The Commission voted to accept the bid of Darling Bros., conditionally, in the sum of \$317,109.00 for the construction and erecting of the City Hall. Afterwards the Commission voted to rescind the motion whereby the contract was awarded conditionally for the reason that the Commission had exceeded the limit specified as above in the resolution of the City Council.

The plaintiffs brought suit in the Superior Court at Worcester, in the County of Worcester, alleging damages in the sum of \$75,000. The case came up for trial in December last, Aldrich, J., presiding. After the plaintiffs put in their case, the Court ruled as requested by the defendant: that the plaintiffs could not maintain their action for the reason that the commission had exceeded the limit specified in the resolution, and that it was the duty of the plaintiffs to ascertain the nature and extent of the authority of the Commission, and that no ratification could be had except by direct vote of the City Council. The plaintiffs excepted and the case goes to the Supreme Judicial Court.

MICHAEL MISKELL *vs.* CITY OF LOWELL.

Action of tort brought by the plaintiff to recover damages for injuries sustained by falling on an icy sidewalk on Merrimack Street on the driveway at the entrance to Morse & Sparks' stable. The injuries complained of were a compound fracture of the right leg. Trial was had at the September term of the Superior Court, Aldrich, J., presiding, and a verdict was rendered for the defendant.

AMOS W. DOWS *vs.* CITY OF LOWELL.

Action of contract brought in the Police Court of Lowell to recover of the defendant the sum of \$87.00, which sum was assessed to the plaintiff on May 1st, 1890, while he was a resident of

Interlacher, Florida. This case was tried before Hadley, J., of the Lowell Police Court, who found for the plaintiff. The defendant appealed to the Superior Court. Afterwards the action was settled by agreement, the defendant paying in full settlement the costs, amounting to \$13.45.

ANN ASHWORTH *vs.* CITY OF LOWELL.

Action of tort brought to recover damages for injuries received from a fall on an icy sidewalk on Fenwick Street. This case was on motion disposed of in favor of the City.

CYRUS JOHNSON *vs.* CITY OF LOWELL.

Action of tort brought to recover damages for personal injuries sustained by the plaintiff coming in contact with a guy-rope on a highway of the City of Lowell. This case was on motion disposed of in favor of the City.

HENRY E. PARKER *vs.* CITY OF LOWELL.

This was a petition to the Superior Court asking for a jury to assess the damages sustained by the plaintiff in his premises, by reason of the closing of the Richardson Brook, in Centralville. It was on motion disposed of in favor of the City.

LEVI MILNER *vs.* CITY OF LOWELL.

Plaintiff filed a petition in the Superior Court to have the jury find and assess the damages sustained by him by reason of the widening and changing of the grade of Riverside Street, whereby land was taken, trees cut down, and the drainage of his house and lands injured. This case was on the trial list at the September term of the Superior Court, and there being no question as to the liability of the City, was settled by paying the plaintiff \$260.00 for all damages sustained.

FERDINAND BENT *vs.* CITY OF LOWELL.

Action of tort brought to recover damages on account of injuries sustained by the plaintiff by reason of being run into by one

of the engines of the fire department of the City. This case was on motion disposed of in favor of the City.

ALFRED GOSSELIN *vs.* CITY OF LOWELL.

Action of tort brought to recover damages for injuries received by the plaintiff, by falling on an icy sidewalk. This case was on motion disposed of in favor of the City.

MARY ST. JOHN *vs.* CITY OF LOWELL.

Plaintiff received injuries by reason of defect on Little Street, which consisted of a hole in the concrete walk from which a lamp post had been previously removed. There was no question as to liability, and the City paid \$125.00 in full settlement.

LOUIS PARENT *vs.* CITY OF LOWELL.

Action of tort brought to recover damages for injuries received by the plaintiff in falling on an icy sidewalk on Crosby Street, and fracturing his leg. This case was on the trial list at the September term, last, and was settled for the sum of \$130.00, including damages and costs. This was considered a very favorable settlement for the City, as the defect consisted of a hole in the sidewalk, caused by ice and snow being removed from a City hydrant, by members of the Lowell Fire Department.

HANNAH LUPTON *vs.* CITY OF LOWELL.

Action of tort brought by the plaintiff to recover damages for injuries sustained by a defect in a driveway existing on the northerly side of Middlesex Street. This case was heard by the Committee on Claims, of the City Council, and was settled by paying the plaintiff \$200.00 in full settlement.

In the several petitions of the Boot Cotton Mills, Merrimack Manufacturing Company, and the Massachusetts Cotton Mills, for abatement of taxes assessed as follows: Boott Cotton Mills, 1887, 1888, and 1889; Merrimack Manufacturing Company, 1887, 1888, 1889, 1890; Massachusetts Cotton Mills, 1888, 1889, 1890; satisfactory settlements were made as to all items except interest without resort to litigation.

The cases of the Tremont and Suffolk Mills, for abatement of taxes assessed 1888, 1889, 1890, are still unsettled ; a trial is to be had within a few days on the petition for abatement of 1889 ; J. B. Richardson, of Boston, was appointed Commissioner by the Superior Court in accordance with the provisions of Chap. 127, of the laws of the Commonwealth for 1890, which provides that any party aggrieved may appeal to the Superior Court.

LOWELL INSTITUTION FOR SAVINGS *vs.* CITY OF LOWELL.

Bill in Equity brought in the Supreme Judicial Court, praying that the City be enjoined from erecting any building upon a certain piece of land in the rear of the City Hall building, and adjoining real estate of plaintiff on Middle Street.

This petition as related in the report of my predecessor, was heard before Holmes, J., who though finding for the defendant reported the case to the full court. Since then a decision has been handed down affirming the findings of the single justice.

The claims of the several parties owning land which was taken by the City Council in the extension of Palmer Street, have all been settled, and in a very satisfactory manner to the City. The Committee on Claims of the City Council also heard and settled several claims pending against the City. Satisfactory settlements were made in each case.

The following cases are now, February 29th, 1892, pending against the City :

Middlesex Company *vs.* City of Lowell (relating to the boundary line of land bordering on the Mill Pond of plaintiff, in Concord River.)

Middlesex Company *vs.* City of Lowell (relating to intercepting sewer.)

Henry A. Hildreth *vs.* City of Lowell.

Ann Donohoe *vs.* City of Lowell.

Bernard Riley *vs.* City of Lowell.

J. M. G. Parker *vs.* City of Lowell.

Pevey Brothers *vs.* City of Lowell.

Solomon Bachman *vs.* City of Lowell.

John H. Holden *vs.* City of Lowell.

Addison Hadley *vs.* City of Lowell.

Etta F. Knowlton *vs.* City of Lowell.

Michael R. Slavin *vs.* City of Lowell.

Thomas Hosty *vs.* City of Lowell.

Ellen Creadon *vs.* City of Lowell.

Charles F. Hamilton *vs.* City of Lowell.

Martha W. Howe *vs.* City of Lowell.

Mary N. Langley *vs.* City of Lowell.

Boott Cotton Mills *vs.* City of Lowell, (relating to interest on tax abatement).

Merrimack Mfg. Company *vs.* City of Lowell, (relating to tax abatement).

Mary Connors *vs.* City of Lowell.

Edmund Paradis *vs.* City of Lowell.

Sadie T. Brunelle *vs.* City of Lowell.

Rose Ann McCarty *vs.* City of Lowell.

Patrick Mungovern *vs.* City of Lowell.

Avila D. Denney *vs.* City of Lowell.

Catherine Shaw *vs.* City of Lowell.

Joseph Small *vs.* City of Lowell.

In conclusion I would say that the duties of this office are many and arduous. The above, as it appears, is only a statement of the cases actually in Court. In addition thereto, this office is required to give many opinions, both written and oral, to pass on all contracts made by the City Council or any Committee thereof, to attend before the County Commissioners or any Committee of the Legislature, and, in fact, at all times to keep a vigilant look-out wherever the interests of the city are concerned.

During the past year, M. E. McDonald, the officer detailed to assist in the duties of this office, has rendered me much valuable assistance, and as the nature of his duties are such as to require special skill on his part, it seemed to me that he should be promoted to a position in the department above that of the ordinary patrolman. Chief Howard concurred, and recommended Mr. McDonald's appointment as an inspector, which was approved by the Mayor and Board of Aldermen.

Respectfully submitted,

JOHN J. HOGAN,

City Solicitor.

ANNUAL REPORT
OF THE
SUPERINTENDENT OF CITY SCALES
AND MEASURER OF WOOD AND BARK
OF THE
CITY OF LOWELL,
FOR THE YEAR 1891.



LOWELL, MASS. :
CITIZEN NEWSPAPER COMPANY, PRINTERS.
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, January 19, 1892.

Received and ordered on file.

MICHAEL J. DOWD,
City Clerk.

REPORT.

To the Honorable Mayor and Board of Aldermen :

In compliance with an ordinance requiring the Superintendent of City Scales to report annually, I have the honor to submit the following report for the year 1891:

I have during the year weighed —

			TONS.	POUNDS.
1011	loads of	Hay.....	1191	1455
189	“	Straw	202	1780
42	“	Iron.....	36	600
22	“	Coal.....	35	170
8	“	Machinery.....	10	1675
8	“	Hides	17	750
6	“	Rags	2	450
5	“	Paper.....	2	300
3	“	Bagging	3	1130
2	“	Stone.....	8	1090
3	“	Squash	2	330
2	“	Grain.....	2	170
2	“	Corn	2	880

			TONS.	POUNDS.
5	loads	Excelsior.....	1	155
1	"	Sand	1	875
1	"	Floor Powder.....		1800
2	"	Vegetables.....	1	775
1	"	Manure.....		1010
1	"	Belting		120
2	"	Beef.....		1340
1	"	Pigs.....		220
8		Carriages		—
157		Horses.....		—

Received for fees for weighing, \$343.00.

RICHARD J. NOONAN,

Superintendent of City Scales.

ANNUAL REPORT

Of the Measurer of Wood and Bark for the year 1891.

I have during the year, measured—

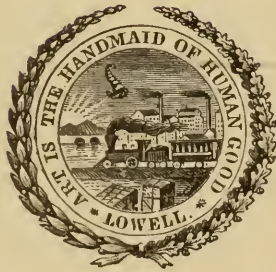
			CORDS.	FEET.
2566	loads of	Wood.....	2818	3 1-2
276	"	Manure	244	1 1-2

Received for fees for measuring, \$140.55.

RICHARD J. NOONAN,

Measurer.

ANNUAL REPORT
OF THE
SEALER OF WEIGHTS AND MEASURES
OF THE
CITY OF LOWELL,
FOR THE YEAR 1891.



LOWELL, MASS. :
CITIZEN NEWSPAPER COMPANY, PRINTERS.
1892.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, January 19, 1892.

Read and ordered on file.

MICHAEL J. DOWD,
City Clerk.

REPORT.

OFFICE OF SEALER OF WEIGHTS AND MEASURES,
LOWELL, MASS., DEC. 31, 1891.

To the Honorable the Mayor and Board of Aldermen of the City of Lowell :

GENTLEMEN,—I herewith respectfully submit the following report. I have inspected and sealed scales, weights and measures as follows:

60	Hay, Coal and Track Scales.	
218	Counter	“
584	Platform	“
363	Trip	“
121	Spring Balances.	
72	Butter	“
79	Wet and Dry Measures.	

Paid for teaming, \$56.50. Received for fees, \$401.20, which I have paid to the City Treasurer.

N. E. ANNIS,
City Sealer.

CITY DOCUMENT, 1891.

SALARIES OF THE OFFICERS

OF THE

CITY OF LOWELL,

FOR THE YEAR 1892.



LOWELL, MASS.

NEWS PRESS: 29 MERRIMACK STREET.

1892.



CITY OF LOWELL.

In the year eighteen hundred and ninety-one.

RESOLUTION

ESTABLISHING THE SALARIES OF OFFICERS OF THE
CITY OF LOWELL FOR THE YEAR 1892.

*RESOLVED by the Board of Aldermen and
Common Council of the City of Lowell, in
City Council assembled, as follows:—*

The salaries of the several city officers for the year beginning on the first day of January and ending on the thirty-first day of December, one thousand eight hundred and ninety-two, shall be at the rate herein mentioned; to be paid monthly, unless herein otherwise ordered.

SECTION 1. The salary of the MAYOR shall be Mayor.
at the rate of twenty-five hundred dollars per annum.

SECT. 2. The salary of the CITY CLERK shall be City Clerk.
at the rate of eighteen hundred dollars per annum.

SECT. 3. The salary of the CITY TREASURER City Treasurer.
shall be at the rate of twenty-five hundred dollars

per annum, for performing the duties of City Treasurer and Collector of Taxes. He shall annually give a bond in the sum of fifty thousand dollars, with good and sufficient sureties, satisfactory to the Mayor and Aldermen, for the faithful performance of his duties, and to account for all sums of money received in the sales of Water Bonds, and the collection of Water Rates, and in the capacity of City Treasurer and Collector of Taxes.

Auditor of Accounts.

SECT. 4. The salary of the AUDITOR OF ACCOUNTS shall be at the rate of fifteen hundred and fifty dollars per annum.

City Solicitor.

SECT. 5. The salary of the CITY SOLICITOR shall be at the rate of two thousand dollars per annum, which shall be in full for all services rendered the city.

Civil Engineer.

SECT. 6. The salary of the CIVIL ENGINEER shall be at the rate of twenty-five hundred dollars per annum, which shall be in full for services as Civil Engineer and Engineer of the Water Board; and he shall devote his whole time to the service of the city. He shall be allowed such assistance as the Chairman of the Joint Standing Committee on Streets, the Chairman of the Standing Committee on Sewers, and the President of the Lowell Water Board may determine.

City Physician.

SECT. 7. The salary of the CITY PHYSICIAN shall be at the rate of seven hundred dollars per

annum, which shall be in full for all services rendered the city, including his duties as a member of the Board of Health.

SECT. 8. The salary of the CLERK OF THE COMMON COUNCIL shall be at the rate of two hundred and fifty dollars per annum. Clerk of the Common Council.

SECT. 9. The salary of the CITY MESSENGER shall be at the rate of twelve hundred dollars per annum. City Messenger.

SECT. 10. The salary of the MEASURER OF WOOD AND BARK, in the rear of the Market-house building, shall be at the rate of six hundred dollars per annum; and he shall account for all fees received by him in his official capacity; shall pay the same into the treasury monthly, and at the same time make a report of the amount so paid to the Auditor of Accounts; and also shall be required to devote, daily, to his duty such time as the Mayor may direct. The salary of any additional measurers of wood and bark shall be at such rate as the Mayor and Aldermen may, from time to time, determine; *provided*, that the same shall not exceed the amount of fees received. Measurer of Wood and Bark.

SECT. 11. The salary of the PRESIDENT OF THE LOWELL WATER BOARD shall be at the rate of four hundred dollars per annum. President of the Lowell Water Board.

SECT. 12. The Joint Committee on Accounts and the Joint Committee on Finance may provide such clerical assistance in the offices of the City Clerk,

City Treasurer, Auditor of Accounts, and Assessors of Taxes, as may be necessary, the expense thereof to be charged to the Reserved Fund. The Committee on State Aid may provide such clerical assistance as may be necessary in the distribution of State Aid, the expense thereof to be charged to the Reserved Fund.

POLICE.

Chief of Police. SECT. 13. The salary of the CHIEF OF POLICE shall be at the rate of eighteen hundred dollars per annum.

Deputy Chiefs. SECT. 14. The salaries of the DEPUTY CHIEFS shall be at the rate of fourteen hundred dollars per annum each; payable weekly.

The salaries of the INSPECTORS OF POLICE, detailed for detective duty, shall be at the rate of twelve hundred dollars per annum each; payable weekly.

The compensation of the SERGEANTS OF POLICE, and INSPECTORS detailed for liquor duty, shall be at the rate of three dollars per day each; payable weekly.

Day and Night
Police Officers.

The compensation of DAY and NIGHT POLICE OFFICERS shall be at the rate of two dollars and seventy-five cents per day each; payable weekly.

Matron of the
Police Station.

The compensation of the MATRON OF THE POLICE STATION shall be at the rate of five hundred dollars per annum; payable weekly.

SECT. 15. All fees received by the officers mentioned in the two preceding sections, for attendance as witnesses, or for any other service in an official capacity, shall be paid by the officer receiving the same to the City Treasurer; and said officers shall, at the same time, report to the Auditor of Accounts the amount thus paid; *provided*, however, that said officers need not account for any fees for travel and attendance before the Supreme Judicial and Superior Courts as witnesses.

SECT. 16. THE STANDING JUSTICE OF THE POLICE COURT OF LOWELL shall be paid at the rate of one hundred dollars per annum, for receiving complaints, issuing warrants, and trying cases under the forty-eighth chapter of the Public Statutes, or any subsequent Act or Ordinance concerning truant children and absentees from school.

The Standing Justice of the Police Court of Lowell.

SUPERINTENDENTS AND INSPECTORS.

SECT. 17. The salary of the SUPERINTENDENT OF STREETS shall be at the rate of eighteen hundred dollars per annum. The city shall furnish a horse and conveyance for his use.

Superintendent of Streets.

SECT. 18. The salary of the SUPERINTENDENT OF PUBLIC BUILDINGS shall be at the rate of sixteen hundred dollars per annum. The city shall furnish a horse and conveyance for the use of himself and the men under his charge.

Superintendent of Public Buildings.

Superintendent
of the Water
Works.

SECT. 19. The salary of the SUPERINTENDENT OF THE WATER WORKS shall be at the rate of sixteen hundred dollars per annum; and the city shall furnish a horse and carriage for his use.

Superintendent
of City Scales.

SECT. 20. The salary of the SUPERINTENDENT OF CITY SCALES shall be at the rate of two hundred dollars per annum; and he shall pay into the city treasury all moneys received for fees.

The salary of any additional Weigher of Hay and other articles shall be at such rate as the Mayor and Aldermen may, from time to time, determine; *provided*, that the same shall not exceed the amount of fees received.

Fish Warden.

SECT. 21. The salary of the FISH WARDEN shall be at the rate of forty dollars per annum; and the salary of POUND-KEEPER shall be at the rate of twenty-five dollars per annum.

Sealer of
Weights and
Measures.

SECT. 22. The salary of the SEALER OF WEIGHTS AND MEASURES shall be at the rate of three hundred dollars per annum, and all fees received by him shall be paid into the city treasury monthly; and he shall, at the same time, report to the Auditor of Accounts the amount of such payment.

Secretary of
the Board of
Overseers of
the Poor.

SECT. 23. The salary of the SECRETARY OF THE BOARD OF OVERSEERS OF THE POOR shall be at the rate of thirteen hundred dollars per annum.

Board of
Health.

SECT. 24. The salary of the appointed members of the BOARD OF HEALTH shall be at the rate of six hundred dollars per annum each.

SECT. 25. The salary of the INSPECTOR OF MILK, Inspector of Milk, Vinegar, Oleomargarine and Provisions. VINEGAR, OLEOMARGARINE, AND PROVISIONS shall be at the rate of nine hundred dollars per annum.

REGISTRARS OF VOTERS.

SECT. 26. The salary of the appointed REGISTRARS OF VOTERS Registrars of Voters. shall be at the rate of five hundred dollars per annum each; and the Chairman of said Board of Registrars shall receive fifty dollars additional, and the City Clerk, as a member *ex-officio*, shall receive a compensation of four hundred dollars per annum. They shall receive their pay in equal amounts, in the months of October, November, and December.

ASSESSORS' DEPARTMENT.

SECT. 27. The salary of the ASSESSORS OF TAXES Assessors of Taxes. shall be at the rate of twenty-two hundred and fifty dollars per annum each; and the salary of the ASSISTANT ASSESSORS shall be at the rate of twelve hundred Assistant Assessors. dollars per annum each. They shall devote their whole time to the service of the city, and shall make out and distribute the tax bills.

FIRE DEPARTMENT.

SECT. 28. The salaries of the several members of the Fire Department, for the year beginning May first, one thousand eight hundred and ninety-two, shall be as herein mentioned, to be paid semi-annually, unless otherwise ordered.

Chief Engineer.

The salary of the CHIEF ENGINEER shall be at the rate of fifteen hundred dollars per annum, payable monthly, which shall be in full payment for all services which may be required of him by the City Council; and he shall devote his whole time to the duties of his office.

First Assistant Engineer.

The salary of the FIRST ASSISTANT ENGINEER shall be at the rate of three hundred dollars; and of the other Assistant Engineers at the rate of two hundred and seventy-five dollars each per annum.

Secretary of the Board of Engineers.

The SECRETARY OF THE BOARD OF ENGINEERS, who shall be a member of the Board, shall receive twenty-five dollars additional, which shall be in full payment for all the services which may be required of him by the Mayor and Aldermen, the Chief Engineer, and the Board of Engineers.

Call Foremen.

The CALL FOREMEN of the respective Hose, Hook and Ladder, and Steam Fire Engine Companies shall be paid at the rate of two hundred and twenty-five dollars each per annum, excepting the foremen of Wilson and Lamson Companies.

Drivers.

DRIVERS of Steamers, Hook and Ladder, Horse Hose Carriages, and Protective Wagon, who shall perform all the duties of stewards, and all other permanent men, shall be paid two dollars and seventy-five cents per day each; payable weekly.

Engineers of Steam Fire Engines.

ENGINEERS OF STEAM FIRE ENGINES shall be paid at the rate of two hundred and twenty-five dollars per annum.

ASSISTANT ENGINEERS OF STEAM FIRE ENGINES shall be paid at the rate of one hundred and seventy-five dollars per annum each. Assistant Engineers of Steam Fire Engines.

All other MEMBERS of Steam Fire Engine, Hose, and Hook and Ladder Companies shall be paid at the rate of two hundred dollars per annum each. Members.

SECT. 29. Whenever any person in the employ of the city shall demand payment of his salary, or any part thereof, it shall be the duty of the Auditor and City Treasurer to deduct therefrom any and all sums of money due from such officer to the city.

